

SERVICE MANUAL



FISHER

TAC-M22

WITH SPEAKERS(STE-M22)

**LW/MW/FM Stereo
Double Cassette Receiver
(EUROPE)**



TAC-M22B
132 290 40
TAC-M22R
132 290 41
TAC-M22W
132 290 42

NOTE:

The photograph on the cover shows the BLACK version of the TAC-M22.
The PEARL WHITE and RED version is identical in all respects.

WM-14451

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NOTE:

Schematic Diagram and Point to Point Wiring Diagram are separately attached to this manual.

The double cassette receiver TAC-M22 is a part of the FISHER System listed below:

STEREO DOUBLE CASSETTE RECEIVER TAC-M22

STEREO TURNTABLE MT-M22

SPEAKERS STE-M22

In case that repairing of the Turntable MT-M22 is required, please refer to its service manual (WM-14441).

SPECIFICATIONS

AUDIO COMPONENT SYSTEM	TAC-M22
AMPLIFIER SECTION Minimum RMS sine wave power per channel at 8 ohms within rated bandwidth at no more than rated T.H.D.	20 Watts x 2
Power Bandwidth	60 Hz – 20 kHz
Total Harmonic Distortion	0.9 %
FM TUNER SECTION Usable Sensitivity	4.0 μ V / 17.1 dBf
Signal-to-Noise Ratio	65 dB
Stereo Separation at 1 kHz	35 dB
AM TUNER SECTION Usable Sensitivity	400 μ V/m
Signal-to-Noise Ratio	45 dB
CASSETTE TAPE DECK SECTION Wow and Flutter (WRMS)	0.07 %
Channel Separation	40 dB
Frequency Response (Fe ₂ O ₃)	50 Hz – 14 kHz
GENERAL SECTION Power Requirements (50 Hz)	110 / 220 V AC
Power Consumption	145 Watts
Dimensions (W x H x D)	335 x 188 x 335 mm
Weight (approx.)	7.6 kg

Dolby is a registered trademark of Dolby Laboratories Licensing Corporation.

SPEAKER SYSTEM	STE-M22
Tweeter	5 cm
Flat Diaphragm Woofer	144 cm ²
Flat diaphragm Passive Radiator	104 cm ²
Maximum Input	20 W RMS
Frequency Response	80 Hz – 17 kHz
Sensitivity 1 W / 1 m	85 dB SPL
Nominal Impedance	8 Ω
Crossover Frequency	3 kHz
Dimensions (W x H x D)	188 x 335 x 162 mm
Weight (approx.)	2.1 kg

Because its products are subject to continuous improvement, Fisher Corporation reserves the right to modify product designs and specifications without notice and without incurring any obligation.

[illegible]

DISASSEMBLY INSTRUCTIONS

GENERAL REMARKS

Before disassembling the unit, spread a soft rubber mat or a cloth on the work bench to avoid scratches and grease spots on the unit.

Reassemble the unit correctly noting the kinds of fastening screws and leads. Please refer to the wiring diagrams and exploded views.

A. REMOVAL OF CABINET COVER

1. Remove the seven screws (B) fastening Cabinet Cover (A). (Fig. 1)

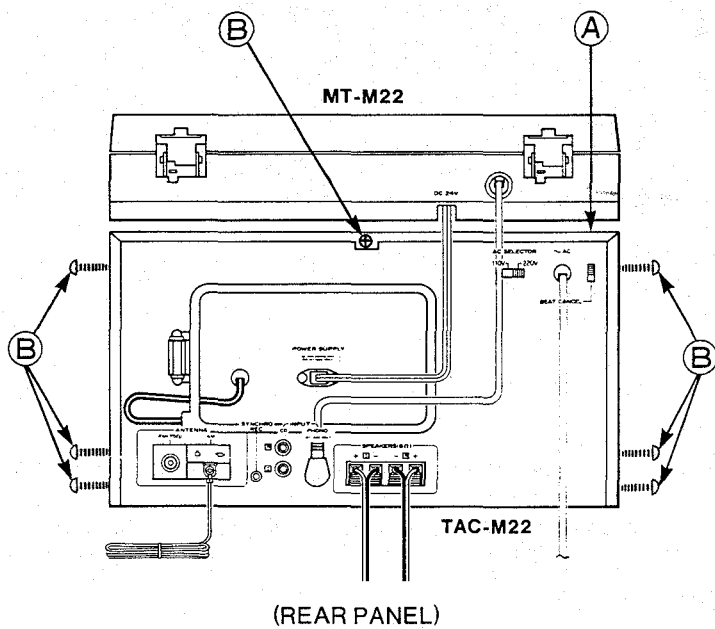


Fig. 1

2. Pull the Cabinet Cover backward. Then, Cabinet Cover can be completely separated from the unit.

B. REMOVAL OF BOTTOM PLATE

1. Turn the unit upside down. Then, remove the four screws (D) fastening the Bottom Plate (C).
The removal of the Bottom Plate will give an access to the repair or adjustment work of AF/RF P.C.Board. (Fig. 2)

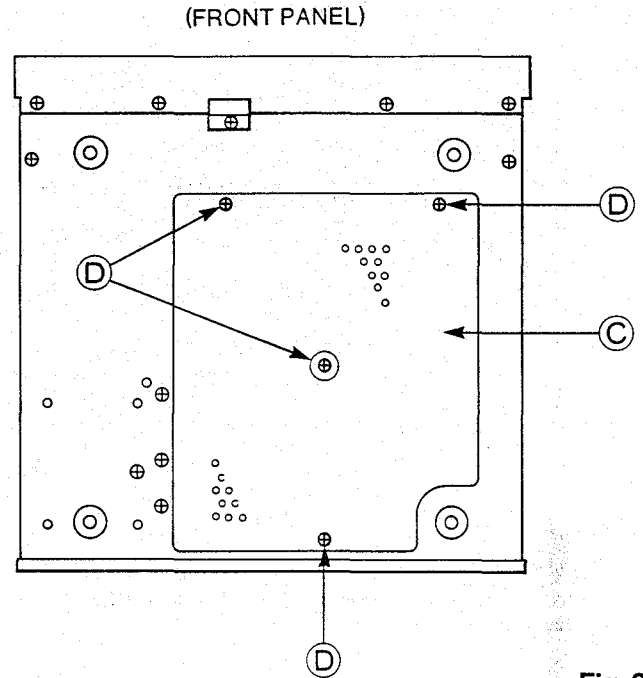


Fig. 2

C. REMOVAL OF FRONT PANEL

1. Pull out all the connectors from the Cassette Deck Mechanism and P.C.Boards to AF/RF P.C.Board.
2. Remove the screw (E) on the left side of the Front Panel. Then, remove AC Switch P.C.Board (F). (Fig. 3)

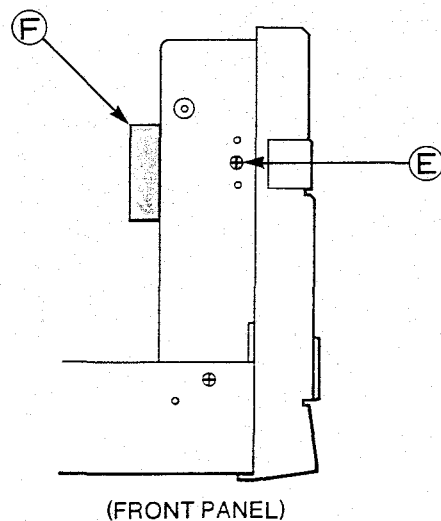


Fig. 3

DISASSEMBLY INSTRUCTIONS (Continued)

3. Disengage the R/P Switch Spring.
4. Turn the unit upside down. Then, remove four screws (G) and the Metal Mount (H) fastening the Front Panel. (Fig. 4)

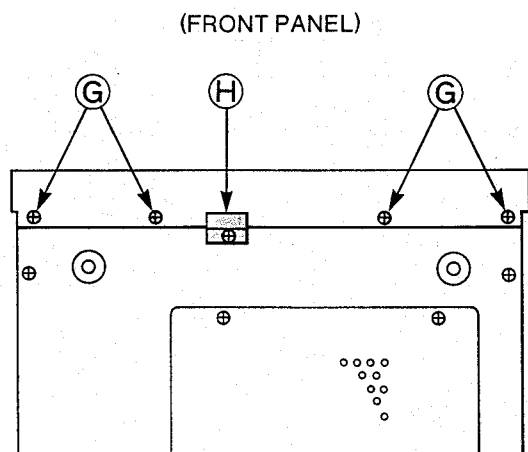


Fig. 4

5. Remove the three screws (I) fastening the Front Panel. Then, Front Panel can be completely separated from the unit. (Fig. 5)

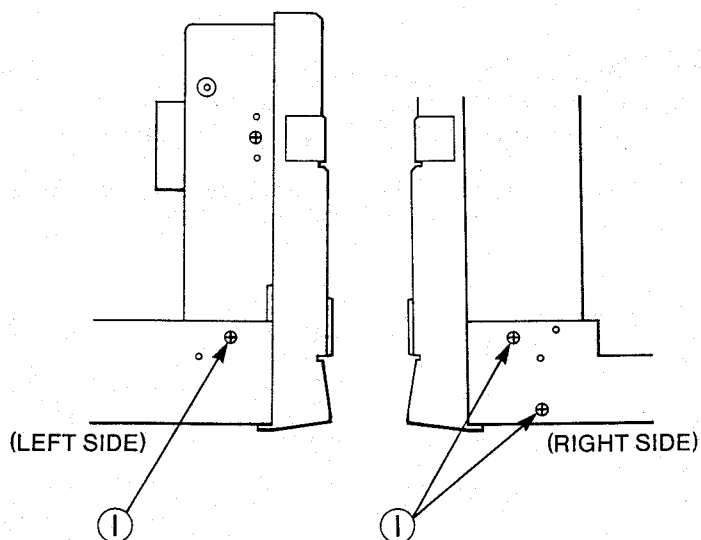


Fig. 5

D. REMOVAL OF CASSETTE DECK MECHANISM

1. After the Front Panel is separated from the unit, remove the four screws (J) fastening the Cassette Deck Mechanism and the four screws (K) fastening the Bottom of the Mechanism. (Fig. 6)

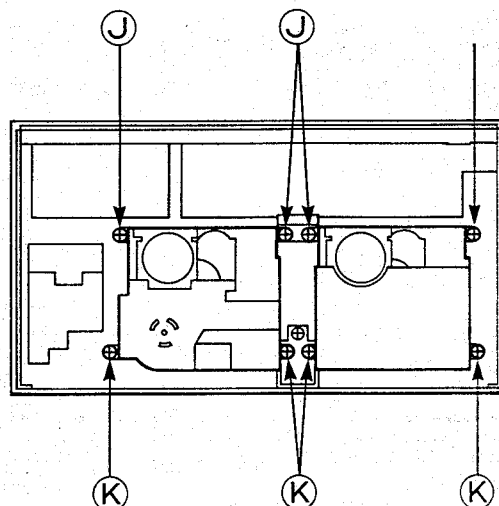
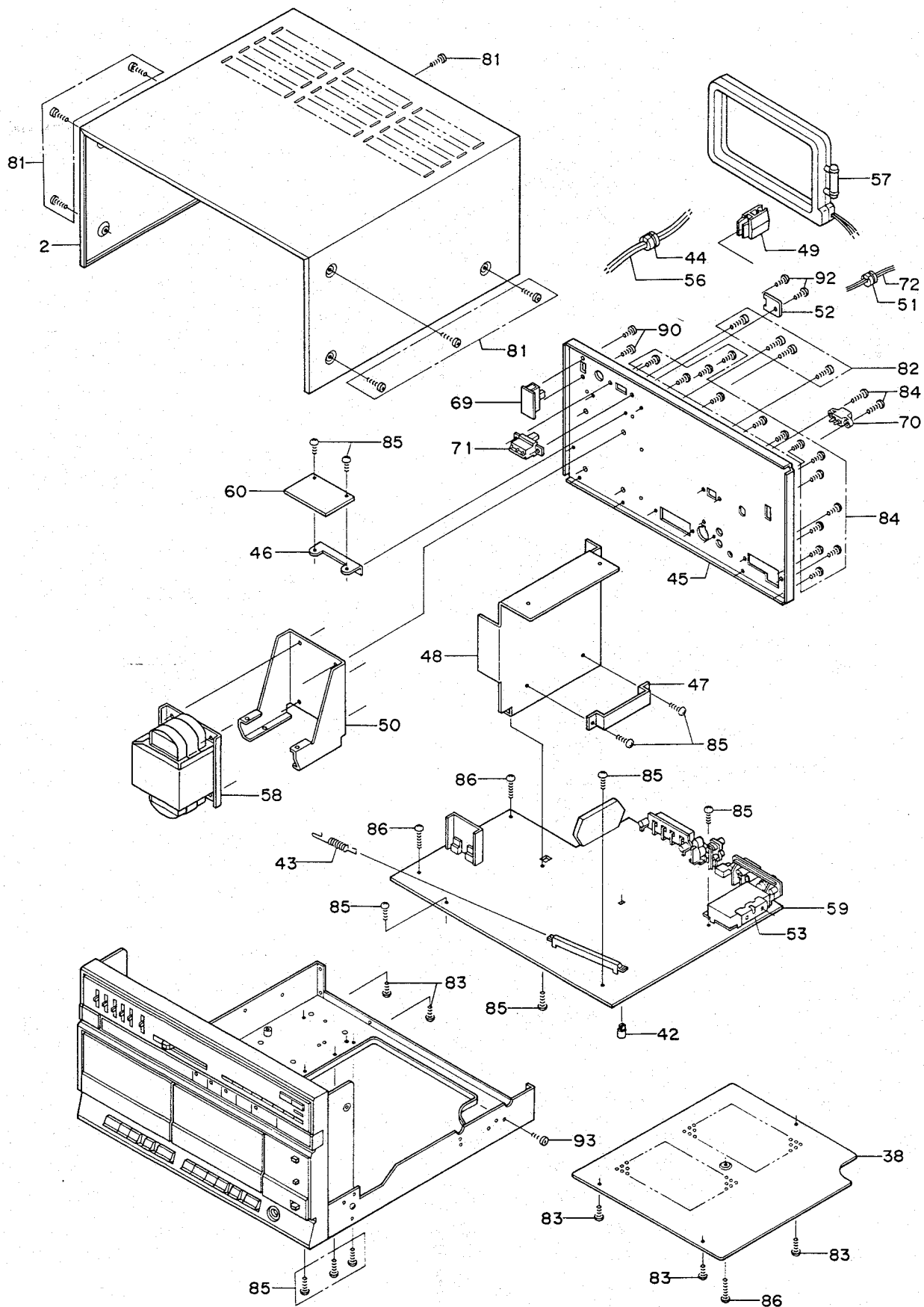


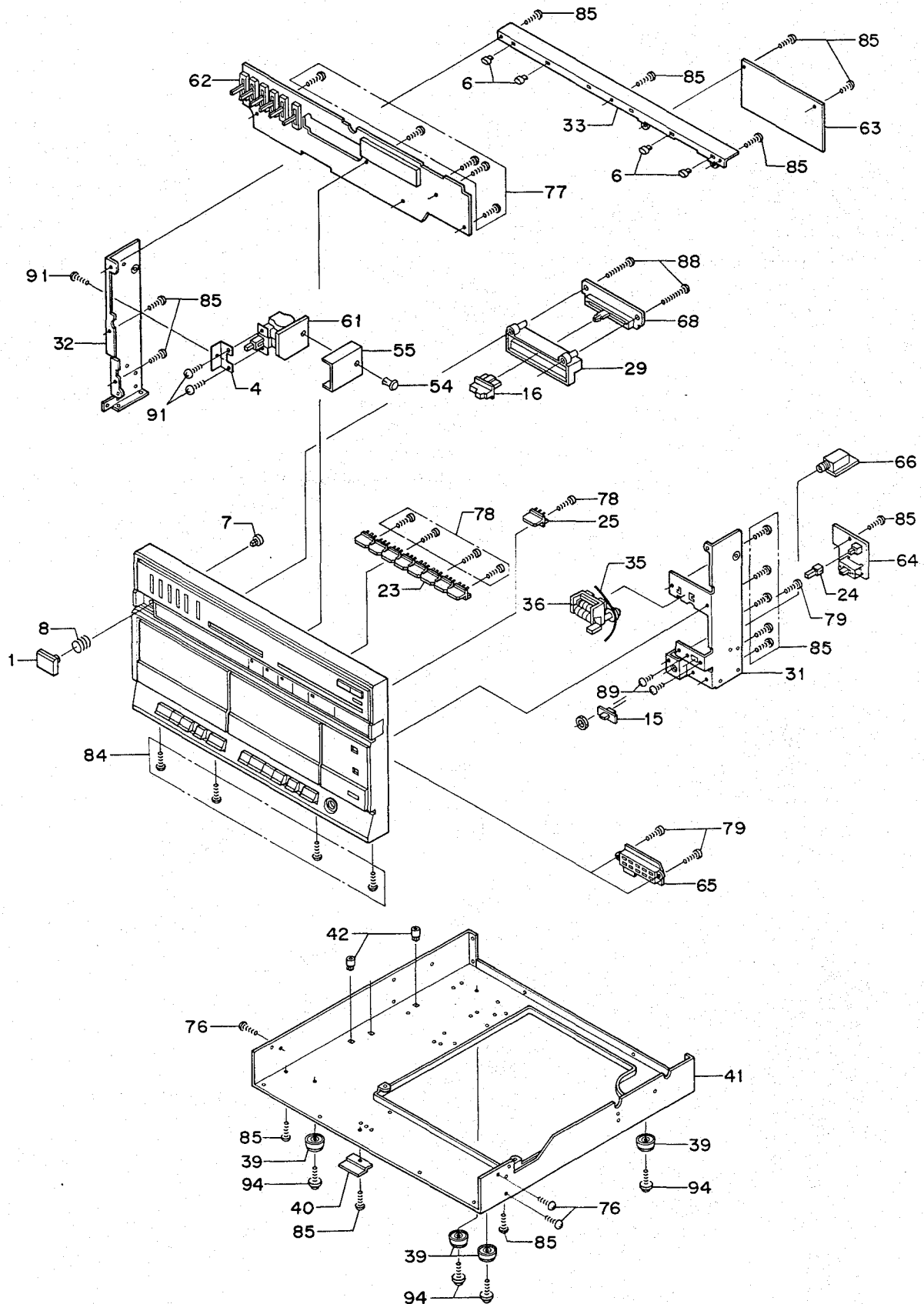
Fig. 6

2. Then, the Cassette Deck Mechanism can be completely separated from the unit. Secure the screws firmly after the repair or adjustment is completed.

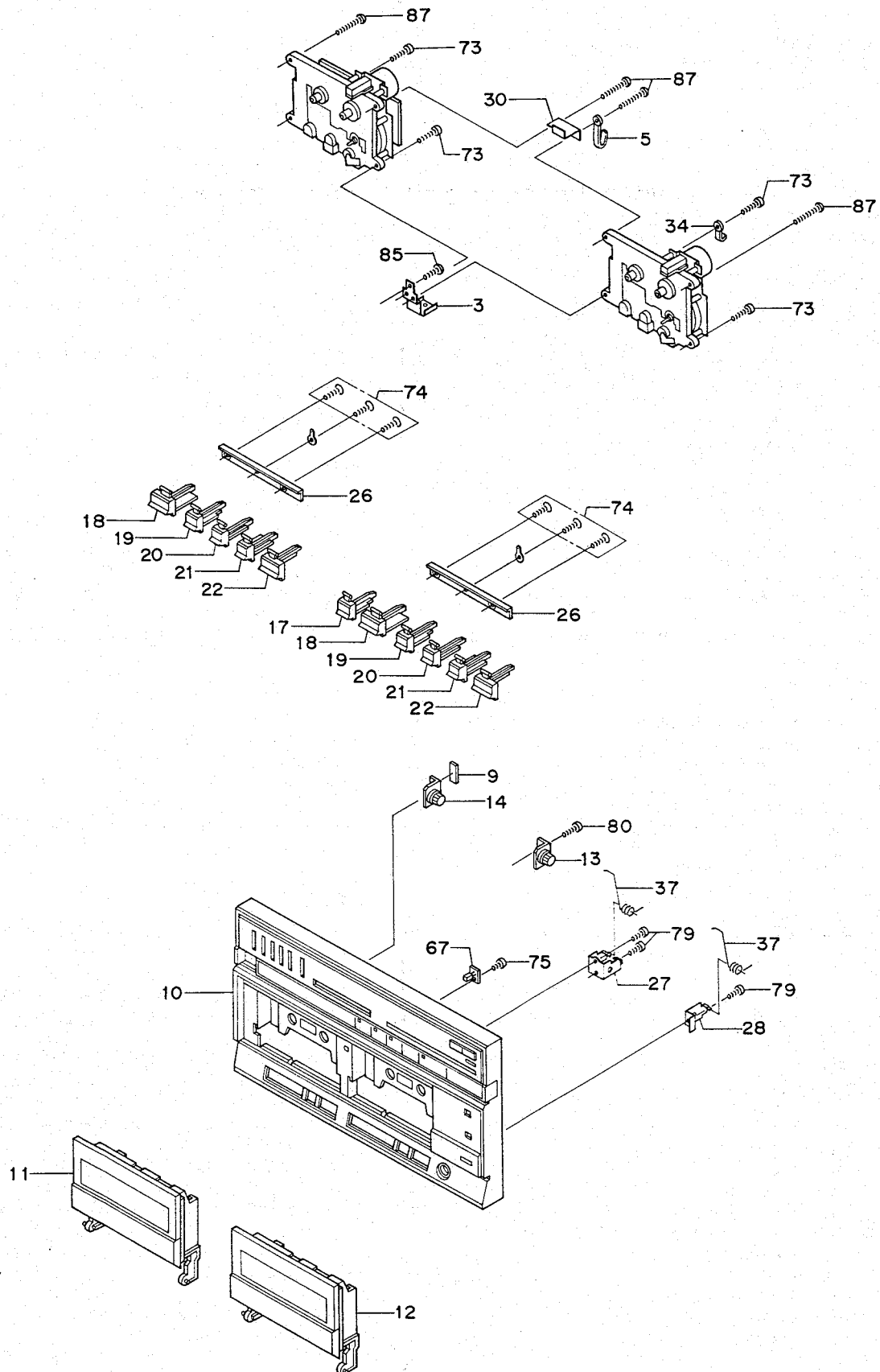
CABINET & CHASSIS EXPLODED VIEW (1)



CABINET & CHASSIS EXPLODED VIEW (2)



CABINET & CHASSIS EXPLODED VIEW (3)



PARTS LIST

Ref. No.	Part No.	Description	Q'ty	Ref. No.	Part No.	Description	Q'ty
PACKING PARTS LIST				37	141-2-8549-16300	Spring Lid Cassette	2
	131-6-2119-02470	Bag Polyethylene-Exp.	1	38	131-2-1105-30300	Plate Bottom	1
	131-6-3009-35070	Pad (Rear)	1	39	131-2-1801-12900	Leg	4
	131-6-3009-35080	Pad (Front)	1	40	131-2-3202-15000	Metal Reinf	1
	131-6-3009-35550	Pad (Roop Antenna)	1	41	131-2-3301-30800	Chassis	1
	131-6-3069-17080	Patching Sheet	1	42	131-2-3614-20300	Mount PCB	3
	131-6-4559-10900	Manufacturing No.	2	43	131-2-5101-23600	Spring	1
	141-6-1139-99507	Box Corrugate-Exp. (Black)	1	44	131-2-6111-11300	Bushing (Power Cord)	1
	141-6-1139-99508	Box Corrugate-Exp. (Red)	1	45	141-2-1219-34000	Panel Rear	1
	141-6-1139-99509	Box Corrugate-Exp. (White)	1	46	141-2-3779-22300	Mount PCB	1
ACCESSORIES PARTS LIST				47	131-2-3101-90000	Metal Mount (IC)	1
	102-3-1703-00816	Screw, Bind Hd. Tapping-1, +M3.0x8	2	48	131-2-6201-35100	Plate Heat Sink	1
	141-2-1729-00500	Holder Antenna	1	49	141-2-3849-04400	Holder Antenna	1
	131-6-2719-10401	Bag Fan	1	50	131-2-3101-98400	Metal Mount	1
	131-6-4519-15700	Guarantee Certificate	1	51	131-2-6111-14200	Bushing	1
	142-6-4119-32425	Explanatory Booklet	1	52	131-2-7104-00500	Plate Pad Switch	1
CABINET & CHASSIS PARTS LIST				53	141-2-8539-56800	Plate Earth	1
1	131-0-1001-63110	Knob Assy (Black)	1	54	131-2-4221-00600	Rivet	1
1	131-0-1001-63111	Knob Assy (Red)	1	55	131-2-6101-31600	Plate Shield	1
1	131-0-1001-63112	Knob Assy (White)	1	ELECTRICAL PARTS LIST			
2	131-2-1410-31302	Cover (Black)	1	56	△ 4-2439-00071	Power Cord	1
2	131-2-1410-31301	Cover (Red)	1	57	4-2579-71910	Loop Antenna	1
2	131-2-1410-31300	Cover (White)	1	58	△ 4-2512-22422	Power Trans	1
3	131-2-3101-96200	Metal Mount	1	59	141-0-1939-10281	AF/RF P.C.B. Assy	1
4	131-2-3101-97800	Metal Mount	1	60	141-0-1939-10291	AC Terminal P.C.B. Assy	1
5	131-2-3608-16300	Cramp Wire	1	61	141-0-1939-10371	AC Switch P.C.B. Assy	1
6	131-2-4208-46700	Spacer	4	62	141-0-1939-10301	Graphic Display P.C.B. Assy	1
7	131-2-4219-18700	Shaft	1	62	141-0-1939-10302	Graphic Display P.C.B. Assy (White only)	1
8	131-2-5101-23500	Spring	1	63	141-0-1939-10311	Memory P.C.B. Assy	1
9	131-2-5205-31800	Cushion	1	64	141-0-1939-10340	Dolby Switch P.C.B. Assy	1
10	141-0-1129-12902	Cabinet Front Assy (Black)	1	65	141-0-1939-10320	Level Ind. P.C.B. Assy	1
10	141-0-1129-12903	Cabinet Front Assy (Red)	1	66	141-0-1939-10330	Headphone P.C.B. Assy	1
10	141-0-1129-12904	Cabinet Front Assy (White)	1	67	141-0-1939-10360	Rec Ind. P.C.B. Assy	1
11	141-0-1249-27331	Lid Cassette Assy (Black)	1	68	141-0-1939-10380	Volume P.C.B. Assy	1
11	141-0-1249-27332	Lid Cassette Assy (Red)	1	69	141-0-1939-11550	Beat Switch P.C.B. Assy	1
11	141-0-1249-27334	Lid Cassette Assy (White)	1	70	△ 4-2359-74031	2P Socket (Power Supply)	1
12	141-0-1249-27328	Lid Cassette Assy (Black)	1	71	△ 4-2312-02650	SWitch Slide 3P (AC Selector) [S7]	1
12	141-0-1249-27330	Lid Cassette Assy (Red)	1	72	4-2449-20260	FM Antenna	1
12	141-0-1249-27335	Lid Cassette Assy (White)	1	SCREW PARTS LIST			
13	141-0-5519-08502	Gear Eject Assy	1	73	101-3-1703-01011	Screw, Bind Hd., +M3.0x10	4
14	141-0-5519-08505	Gear Eject Assy	1	74	103-3-1202-60811	Screw, Flat Hd. Tapping-2, +M2.6x8	6
15	141-2-1649-35500	Knob Slide	1	75	143-3-1302-60611	Screw, Pan Hd. Tapping-B, +M2.6x6	1
16	141-2-1649-37400	Knob Slide	1	76	143-3-1303-00611	Screw, Pan Hd. Tapping-B, +M3.0x6	3
17	141-2-1659-19202	Button Record	1	77	143-3-1303-00811	Screw, Pan Hd. Tapping-B, +M3.0x8	5
18	141-2-1659-19302	Button Play	2	78	143-3-1702-00611	Screw, Bind Hd. Tapping-B, +M2.0x6	5
19	141-2-1659-19402	Button Rewind	2	79	143-3-1702-60611	Screw, Bind Hd. Tapping-B, +M2.6x6	6
20	141-2-1659-19502	Button FF	2	80	143-3-1702-60811	Screw, Bind Hd. Tapping-B, +M2.6x8	1
21	141-2-1659-19602	Button Pause	2	81	143-3-1703-00618	Screw, Bind Hd. Tapping-B, +M3.0x6 (Black)	7
22	141-2-1659-19702	Button Eject	2	81	131-2-4201-27103	Screw, Bind Hd. Tapping-B, +M3.0x6 (Red)	7
23	141-2-1659-48200	Knob Seesaw	1	81	131-2-4201-27103	Screw, Bind Hd. Tapping-B, +M3.0x6 (White)	7
24	141-2-1659-48300	Knob Push Switch	1	82	143-3-1804-00818	Screw, Truss Hd. Tapping-B, +M4.0x8	4
25	141-2-1659-48700	Knob Seesaw	1	83	143-3-1903-00611	Screw, Brazier Hd. Tapping-B, +M3.0x6	5
26	141-2-2629-04900	Holder Button	2	84	143-3-1903-00818	Screw, Brazier Hd. Tapping-B, +M3.0x8	21
27	141-2-2629-05800	Bracket Lid Cassette	1	85	143-3-1903-00811	Screw, Brazier Hd. Tapping-B, +M3.0x8	28
28	141-2-2629-05900	Bracket Lid Cassette	1	86	143-3-1903-01411	Screw, Brazier Hd. Tapping-B, +M3.0x14	3
29	141-2-2629-07400	Cover Volume	1	87	143-3-1903-01611	Screw, Brazier Hd. Tapping-B, +M3.0x16	4
30	141-2-3159-04200	Metal Reinf	1	88	143-3-1903-02511	Screw, Brazier Hd. Tapping-B, +M3.0x25	2
31	141-2-3169-26100	Metal Mount (Right)	1	89	101-3-1302-60411	Screw, Pan Hd., +M2.6x4	2
32	141-2-3169-26200	Metal Mount (Left)	1	90	101-3-1302-60418	Screw, Pan Hd., +M2.6x4	2
33	141-2-3169-28700	Metal Mount	1	91	101-3-1303-00611	Screw, Pan Hd., +M3.0x6	3
34	141-2-4729-04200	Lug	1	92	101-3-1303-00618	Screw, Pan Hd., +M3.0x6	2
35	141-2-5649-04300	Belt Counter	1	93	101-3-1702-60611	Screw, Bind Hd., +M2.6x6	1
36	141-2-8119-13200	Counter	1	94	131-2-4201-25200	Screw, Brezier Hd. Tapping-B, +M3.0x6 Sems	4

CASSETTE DECK ELECTRICAL ADJUSTMENTS

EQUIPMENT REQUIRED

- Audio Signal Generator
- Attenuator
- Frequency Counter
- VTVM (2 Sets)
- Dummy Load (47 k Ω)
- Dualtrace Synchroscope
- Frequency Counter
- DC Voltage Regulator
- Test Tapes
 - * 3kHz Test Tape (Example: TEAC MTT-111) for Tape Speed Adjustment
 - * 10kHz Test Tape (Example: TEAC MTT-114) for Head Azimuth Adjustment
 - * Test Tape for DOLBY Calibration Level (Example: TEAC MTT-150) in Playback Gain Adjustment
- Test Tapes for Recording and Playback Operations
 - * Normal Tape (Example: TDK AC-223)
 - * Metal Tape (Example: TDK AC-712)
- Alignment Tool

CLEANING AND DEMAGNITIZATION OF THE HEAD

If the tape-contacting surfaces of the parts such as the head, the capstan and the pinch roller are dirty, it results to irregular tape running, imperfect recording and erasing, tone deterioration, and the curling of the tape at the capstan.

• Cleaning Method

1. Wipe the head, the capstan, and the pinch roller clean with a cleaning cotton swab. If they are extremely dirty, use a cotton swab moistened in absolute alcohol or cleaning liquid.

• Head Demagnetization

The head is magnetized after long usage and it results to noise and tone deterioration. Therefore, demagnetize the head with a demagnetizer. Be sure to turn off the power source.

TAPE SPEED ADJUSTMENT

1. Connect the frequency counter to the speaker terminal. Then, insert a 3kHz test tape (Example: TEAC MTT-111) into the cassette compartment.

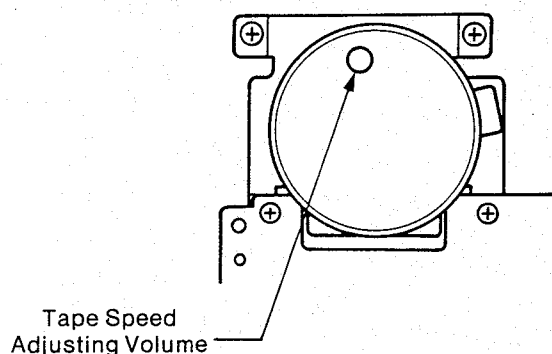


Fig.1

2. Play back a 3kHz test tape and adjust the tape speed by slowly turning the Adjusting Volume inside the motor until the frequency counter reads 3000Hz \pm 10Hz.

HEAD AZIMUTH ADJUSTMENT

1. Play back a test tape (Example: TEAC MTT-114) to adjust the head azimuth. Observe the output wave forms of the Left and Right channels. First of all, play back the 10kHz signal. Turn the azimuth adjusting screw for the R/P Head until the phase of the Left and Right channels becomes identical and their output levels are maximized.

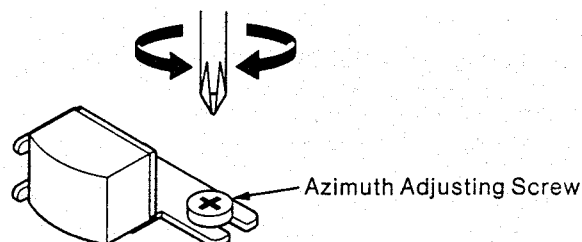


Fig. 2

2. After the adjustment, secure the azimuth adjusting screw with paint or glue.

PLAYBACK GAIN ADJUSTMENT (DECK 1)

LEFT CHANNEL

1. Connect the VTVM to the Dolby test point TP5 and insert a test tape for Dolby Calibration Level (Example: TEAC MTT-150) into the cassette compartment.
2. Check that the VTVM reads 580mV for the output of the left channel while playing back the test tape.
3. If necessary, adjust the output to the specified one by turning VR3 while the test tape is played back.

RIGHT CHANNEL

Connect the VTVM to the Dolby test point TP6. Then, adjust VR4 for the right channel by following the same procedure as in LEFT CHANNEL.

PLAYBACK GAIN ADJUSTMENT (DECK 2)

LEFT CHANNEL

1. Connect the VTVM to the Dolby test point TP5 and insert a test tape for Dolby Calibration Level (Example: TEAC MTT-150) into the cassette compartment.
2. Check that the VTVM reads 580mV for the output of the left channel while playing back the test tape.
3. If necessary, adjust the output to the specified one by turning VR5 while the test tape is played back.

RIGHT CHANNEL

1. Connect the VTVM to the Dolby test point TP6. Then, adjust VR6 for the right channel by following the same procedure as in LEFT CHANNEL.

CASSETTE DECK ELECTRICAL ADJUSTMENTS (Continued)

BIAS FREQUENCY ADJUSTMENT (DECK 2 Only)

Set the switches to the following positions.

- FUNCTION Switch → AUTO PLAY
- TAPE SELECT Switch → METAL
- Connect the Pick-up coil into the Frequency Counter.

1. Insert a metal tape (Example: TDK AC-712) into the cassette compartment and set the deck in the recording mode.
2. Allow the Pick-up coil to come near the Bias OSC coil (T701). Then, adjust the bias frequency to 85kHz by turning the core of the Bias OSC coil (T701).

BIAS CURRENT ADJUSTMENT (DECK 2 only)

Set the switches to the following positions.

- FUNCTION Switch → AUTO PLAY
- TAPE SELECT Switch → NORMAL

LEFT CHANNEL

1. Set the unit in the recording pause mode and connect the audio signal generator to the CD INPUT.
2. Connect the VTVM and frequency counter to the Dolby test point TP5.
3. Insert a normal tape (Example: TDK AC-223) into the cassette compartment and set the deck in the recording mode and apply 1kHz (8mV) signal from the CD INPUT. Then, adjust the REC Level Volume until the voltages of Dolby test point TP5 becomes 32mV (Dolby Level: -30dBs).
4. Change the input signal to 12.5kHz. Then, adjust the volume (VR701) so that the output deviation between the 1kHz and 12.5kHz signals becomes -1 ~ -2dB.

5. After the adjustment, set the tape select switch to METAL position and record the metal tape (TDK AC-712) and play it back.
6. Check that the output deviation between 1kHz and 12.5kHz signals becomes $\pm 3\text{dB}$.

RIGHT CHANNEL

1. Connect the audio signal generator to the Right channel CD INPUT. and VTVM to the Dolby Test Point TP6. Then, adjust the volume (VR702) for the right channel by following the same procedure as in LEFT CHANNEL.

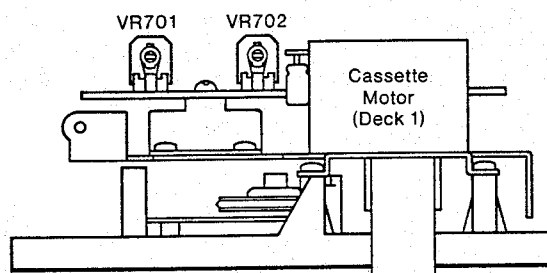
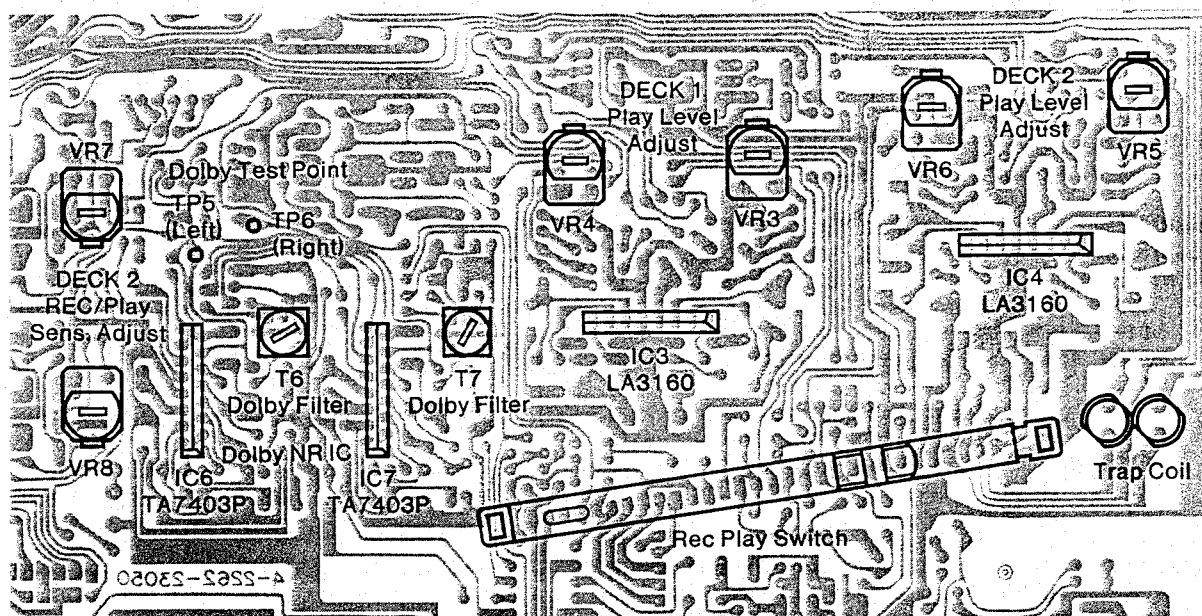


Fig. 3

RECORD/PLAY SENSITIVITY ADJUSTMENT

1. Set the unit in the recording mode. Apply the 1kHz signal through CD INPUT to the unit.
2. Connect the VTVM to Dolby test point TP5 (Left) and TP6 (Right). Record the metal tape (TDK AC-712) and play it back. Then, adjust VR7 (Left) and VR8 (Right) until the voltage becomes $320\text{mV} \pm 1\text{dB}$.

PRINTED CIRCUIT BOARD ALIGNMENT POINTS (CASSETTE DECK SECTION)



CASSETTE DECK MECHANICAL ADJUSTMENTS

EQUIPMENT REQUIRED

- Cassette-type Torquemeter (100g-cm/160g-cm)
- Round-nose Pliers
- Plus Screwdriver
- A Pair of Tweezers
- Paint or glue

GENERAL REMARKS

1. Before and after the mechanism adjustment, clean the tape contacting surfaces with a soft cloth soaked in alcohol.
Trouble may occur because of oil and grease stains.
The belts must be kept clean while the adjustments are performed.
2. If the Pinch Roller or Belt has quality deterioration such as scratches, replace it with a new one.
3. When the cassette tape is inserted into the cassette holder, the Play button can not be pressed.
If the Mechanism is required to function under this condition, push the Cassette Lever as illustrated, so that the button is released and the mechanism functions normally.

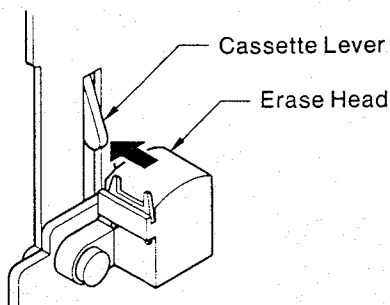


Fig.1

4. To prevent damage to the pinch rollers, always depress the STOP/EJECT button before switching the power off when in the recording mode (Deck 2) or playback mode (Deck 1 and 2).
If the POWER button is released during playback on Deck 1 and the STOP/EJECT button is depressed in error, the cassette compartment lid will not open no matter how many times the STOP/EJECT button is depressed. In this case, depress the POWER button once again and then depress the PLAY button once, and depress the STOP/EJECT button.

POSITION ADJUSTMENT OF LEAF SWITCHES

This model has the following four leaf switches. Checking and adjustment for each switch shall be conducted in accordance with each adjusting item.

The unit should be set in the stop mode at each adjustment.

- * Motor Switch
- * Play Muting Switch
- * FF REW (ASF) Switch
- * REC Switch

NOTE:

The clearance of the switch contacts should be 0.5 ~ 1.0mm when the switch is not mounted on the unit. If not, adjust the clearance by carefully bending the contacts.

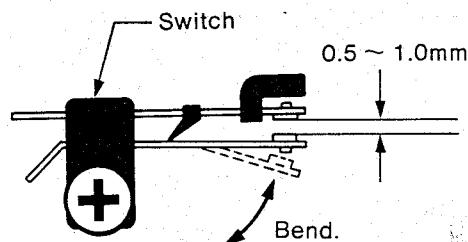


Fig. 2

1. Motor Switch

This switch is turned on by the shut-off switch lever when the Play button is pressed.

The driving motor rotates the Flywheel and the rotational force transferred by the Actuate Gear makes the mechanism function.

- * Check that the Motor Switch touches the shut-off Switch Lever and the clearance of the switch contacts is 0.3 ~ 0.4mm.

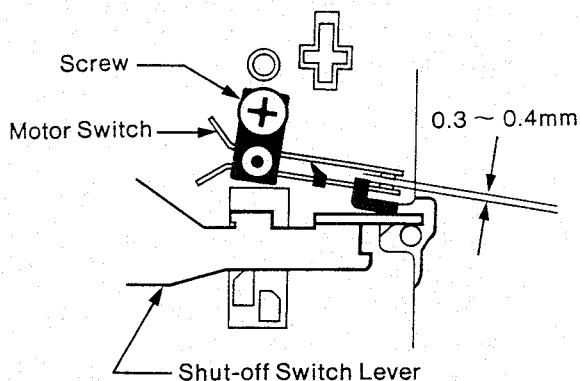


Fig. 3

CASSETTE DECK MECHANICAL ADJUSTMENTS (Continued)

2. Play Muting Switch

This switch is turned on by the Slide Base when the unit is set in the recording or playback mode and it turns off the muting circuit.

- * Check that the clearance between the Play Muting Switch and the Slide Base is 0.05mm as illustrated when the Pause button is pressed.
- * Check that the clearance of the switch contacts is 0.25mm in the recording or playback mode as illustrated.

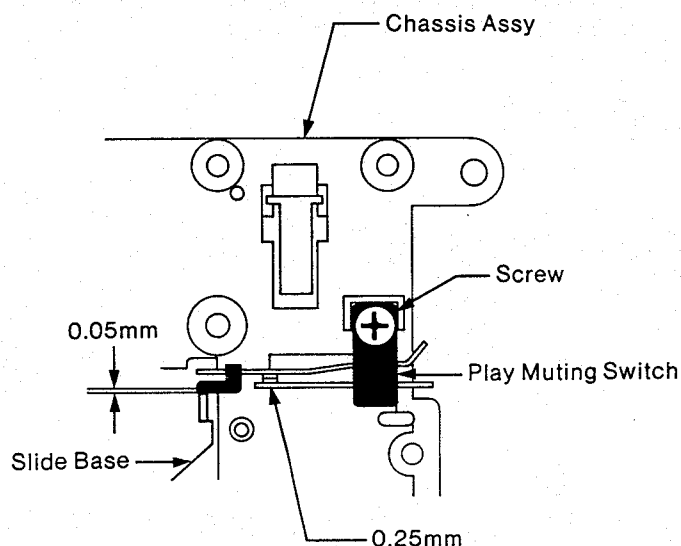


Fig. 4

3. FF REW (ASF) Switch

This switch is turned on by the Cue Review Switch Lever when the unit is set in the cue or review mode by pressing the F.FWD or Rewind button in the playback mode. It also passes current into the muting circuit and solenoid. Then, the ASF circuit functions.

- * Check that the FF REW (ASF) Switch touches the Cue Review Switch Lever and the clearance of the switch contacts is 0.2 ~ 0.3mm.

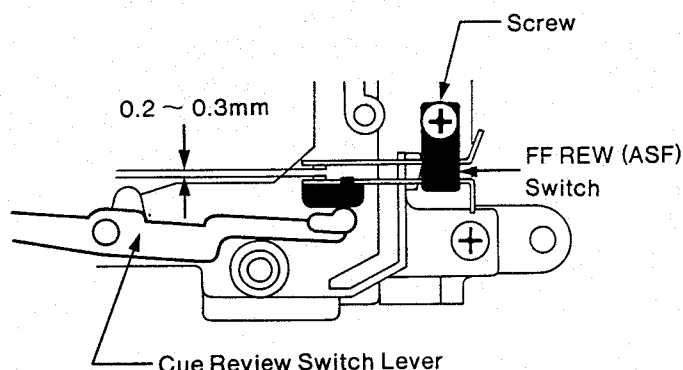


Fig. 5

4. REC Switch

This switch is turned on by the Record Arm when the unit is set in the recording mode, turns on the OSC circuit.

- * Check that the clearance between the OSC Switch and the Chassis Plate is 1.0 ~ 1.5mm as illustrated.

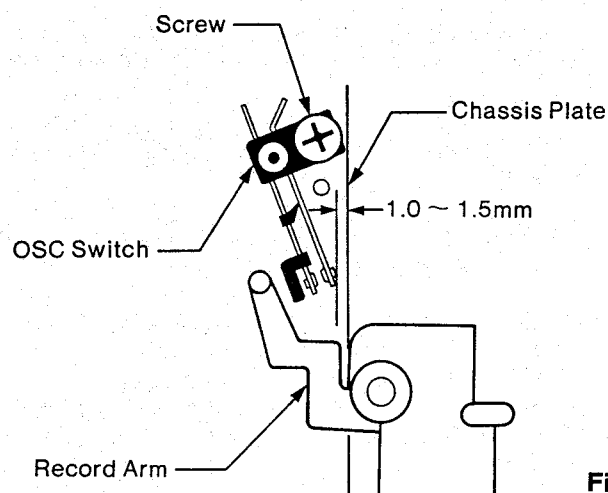


Fig. 6

Switch Adjustment

Loosen the screws fastening each switch and move the switches to the specified positions if position adjustments are required.

After the adjustment, tighten the screws and secure the switches with paint or glue.

TAKE-UP TORQUE

1. Insert a cassette-type torquemeter (100g-cm) into the cassette compartment and set the unit in the playback mode. Then, check that the take-up torque is 35 ~ 60g-cm.

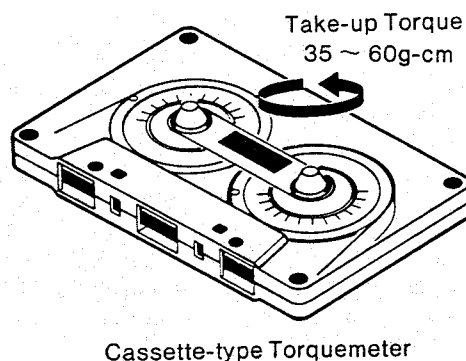


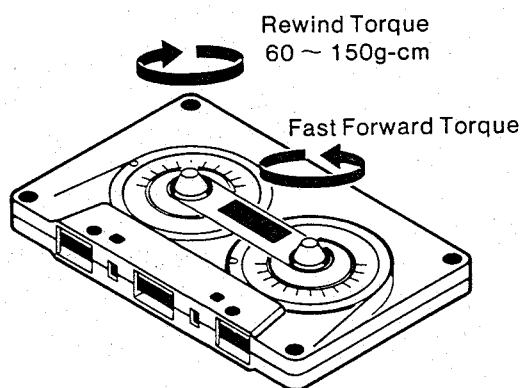
Fig. 7

2. If not, replace the Friction Assembly with a new one.

F.FWD AND REWIND TORQUES

1. Insert a cassette-type torquemeter (160g-cm) into the cassette compartment and measure the fast forward and rewind torques. Check that each torque is 60 ~ 150g-cm.

CASSETTE DECK MECHANICAL ADJUSTMENTS (Continued)



Cassette-type Torquemeter

Fig. 8

2. If not, replace the Friction Assembly with a new one.

ASF PLUNGER ADJUSTMENT

ASF (Auto Search Function) detects a silent space (unrecorded portion) between each music on a music tape and automatically plays back a desired music from the start.

The unrecorded portion should last for more than approximately 4 seconds.

It may not operate correctly in the following cases:

- * When the recorded sound is often interrupted as in a speech tape.
- * When the silent space does not last long enough (less than 4 seconds).
- * When there is an appreciable noise in the silent space between two adjacent programs.
- * When the unit is placed on a television set, ASF may not operate correctly due to adverse effect of the TV signal. In this case, put the unit away from the television set.

If ASF Plunger is not correctly positioned, ASF Switch does not function correctly, F.FWD or Rewind button is released while ASF is working, or a button may not be locked.

1. Remove the Mechanism Chassis from the unit by following its removal instructions.
2. Loosen the screw fastening the Plunger and adjust the Plunger by moving it in the direction of the arrow, so that the Plunger Lever is tightly attached to the two absorption surfaces of the Plunger as illustrated.

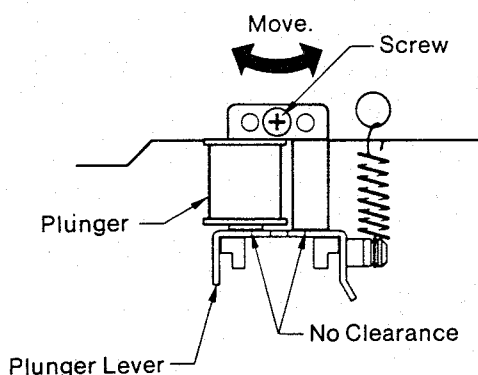


Fig. 9

3. After the adjustment, tighten the screw. Set the unit in the playback mode and check that ASF mechanism functions correctly as follows:
 - * Check if F.FWD button can be locked by pressing it.
 - * Check if Rewind button can be locked by pressing it.
4. Readjust the Plunger position if either F.FWD or Rewind button can not be locked or is soon released.
5. After the confirmation, secure the screw with paint or glue.

ASO LEVER

The service part of the ASO Lever is not cut to avoid deforming, as illustrated.

When replacing, cut 1.5 ~ 3mm of the part indicated in the illustration.

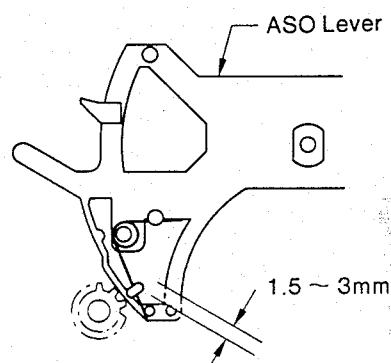


Fig. 10

NOTICE ON REASSEMBLY

When reassembling the mechanism, check if the resistance between the screw fastening the Record/Playback Head and the Lug attached to the Chassis Plate is less than 3Ω. When the resistance is more, there will be noise during recording or playback of the cassette tape.

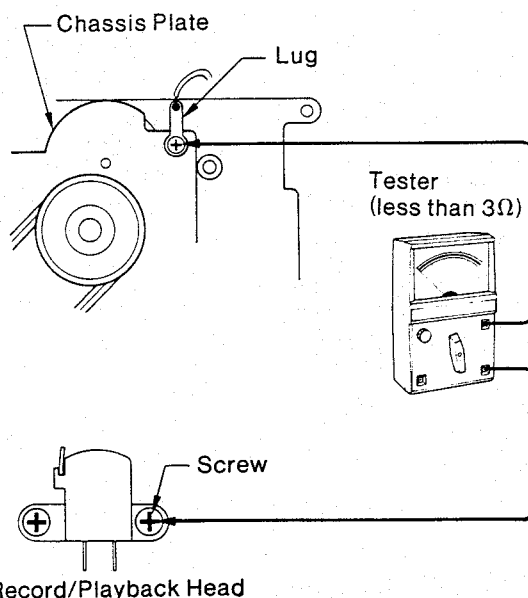
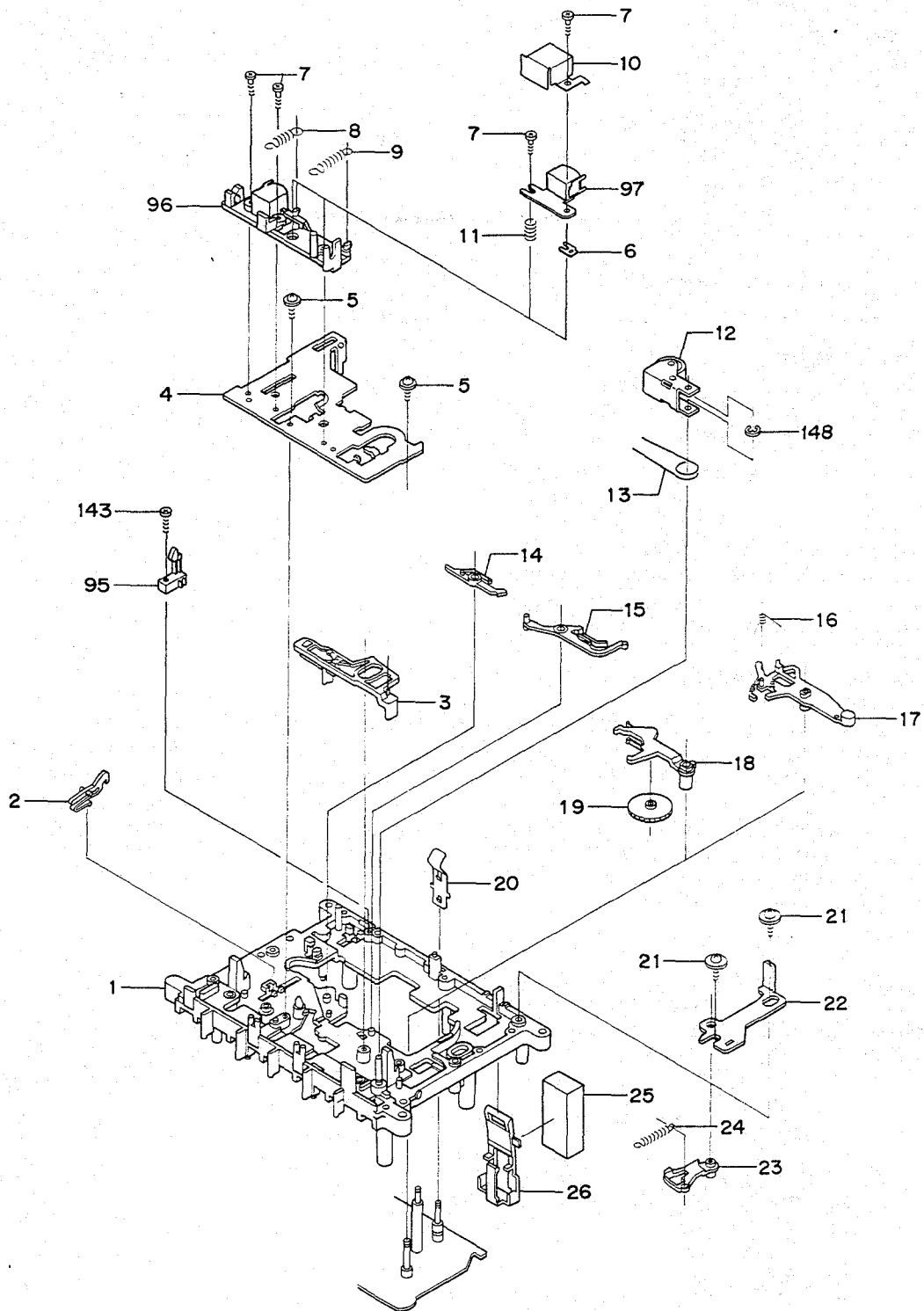


Fig. 11

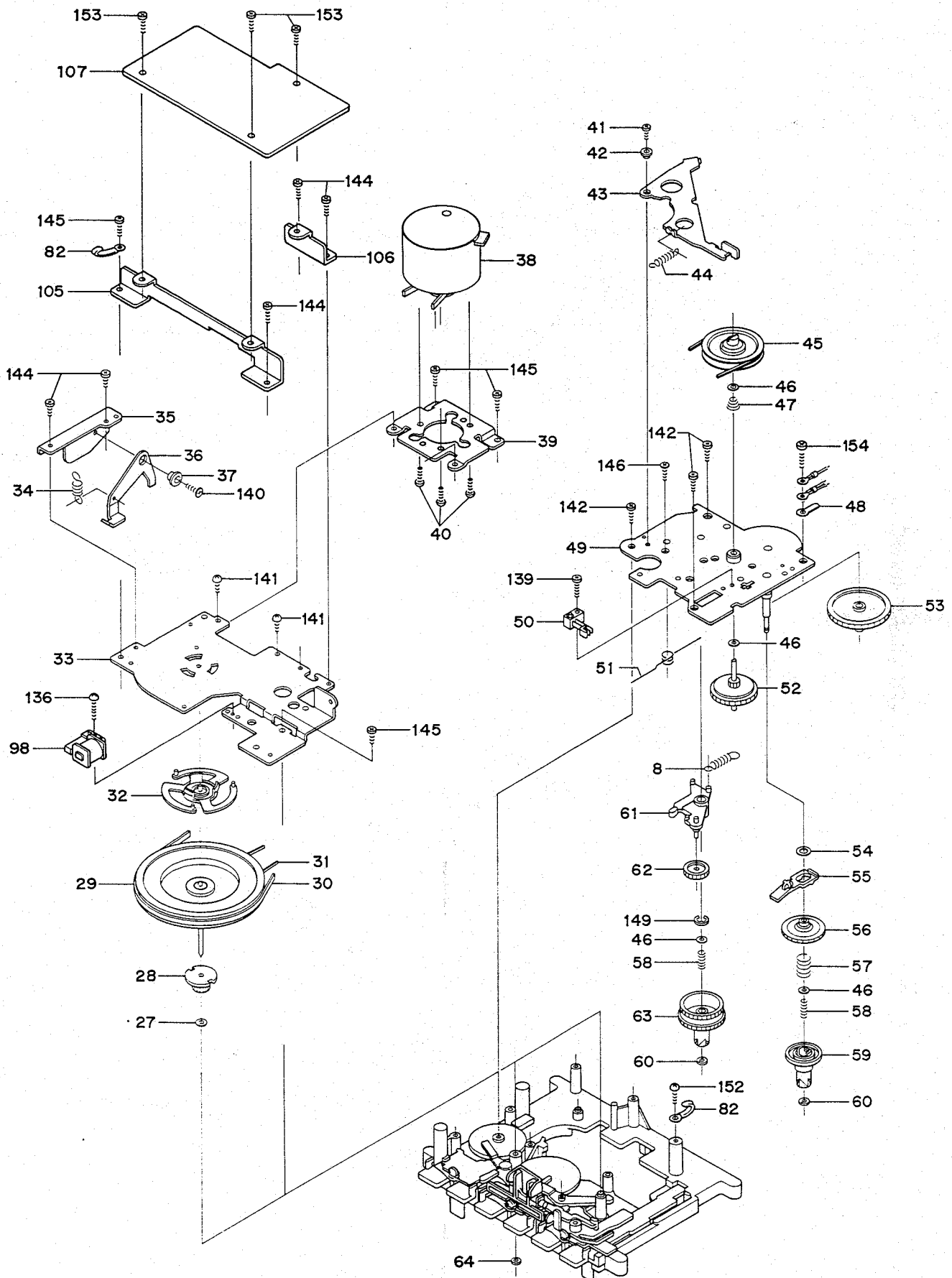
MECHANISM EXPLODED VIEW

(Deck 1 Side Chassis Top)



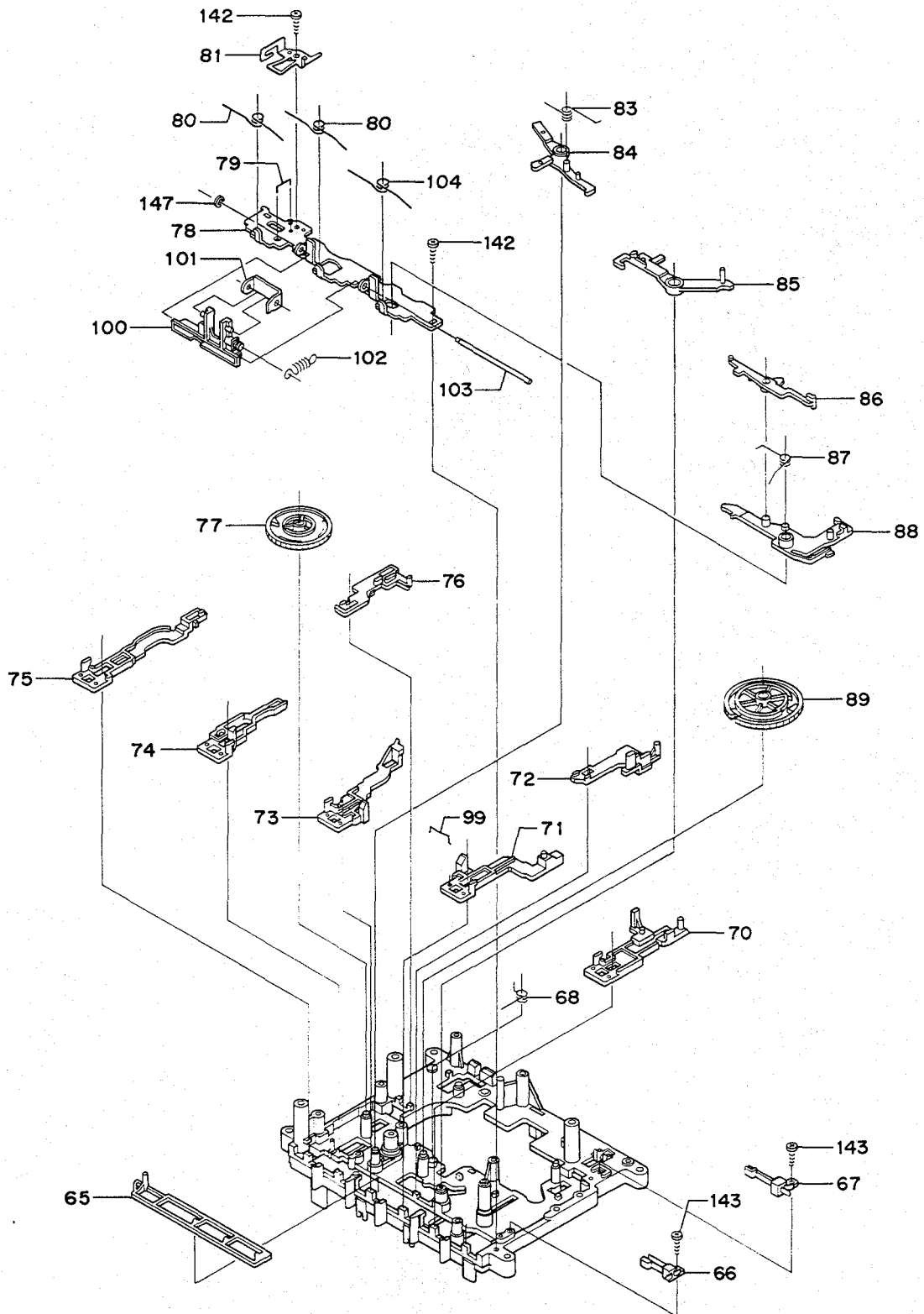
MECHANISM EXPLODED VIEW (Continued)

(Deck 1 Side Chassis Bottom 1)



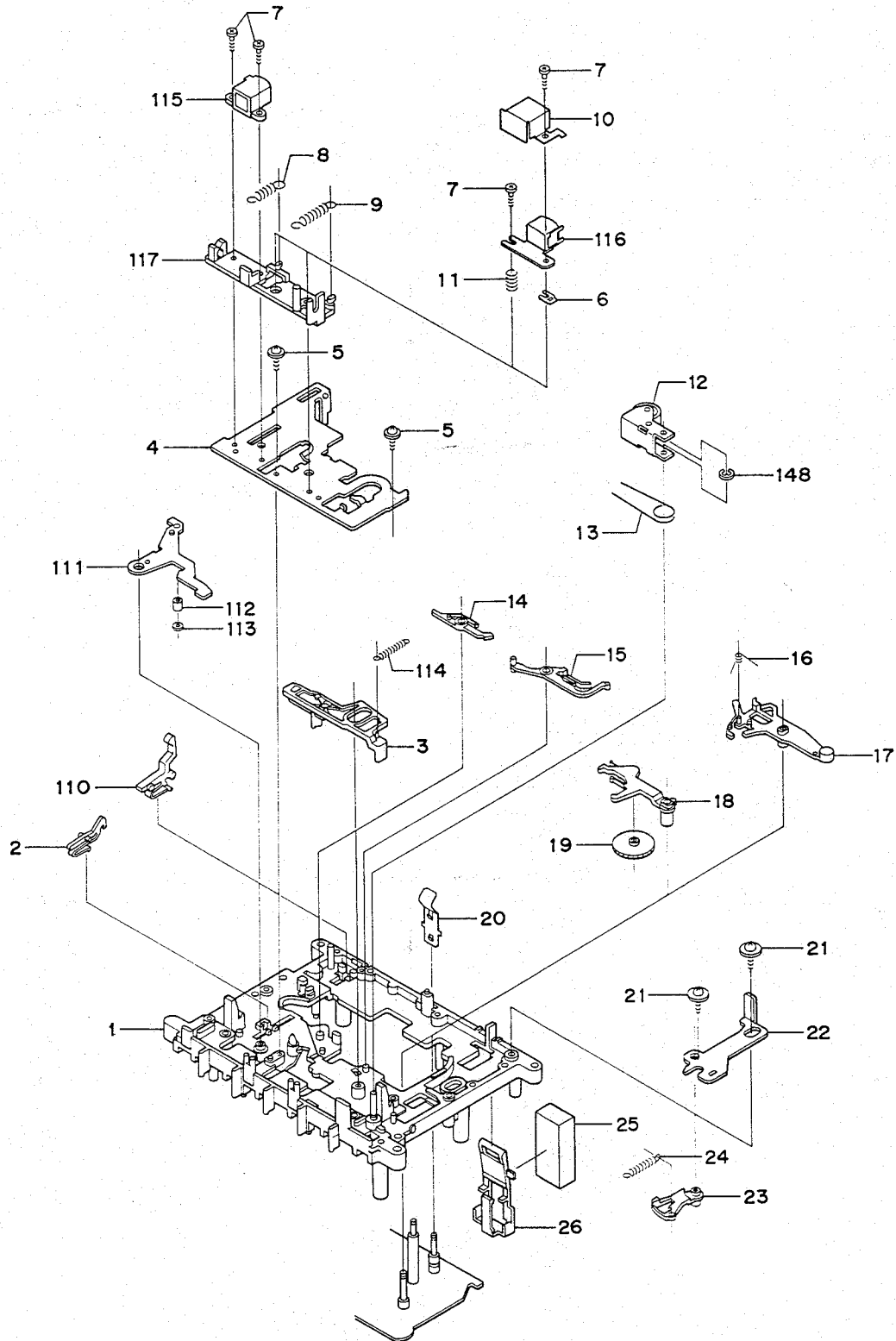
MECHANISM EXPLODED VIEW (Continued)

(Deck 1 Side Chassis Bottom 2)



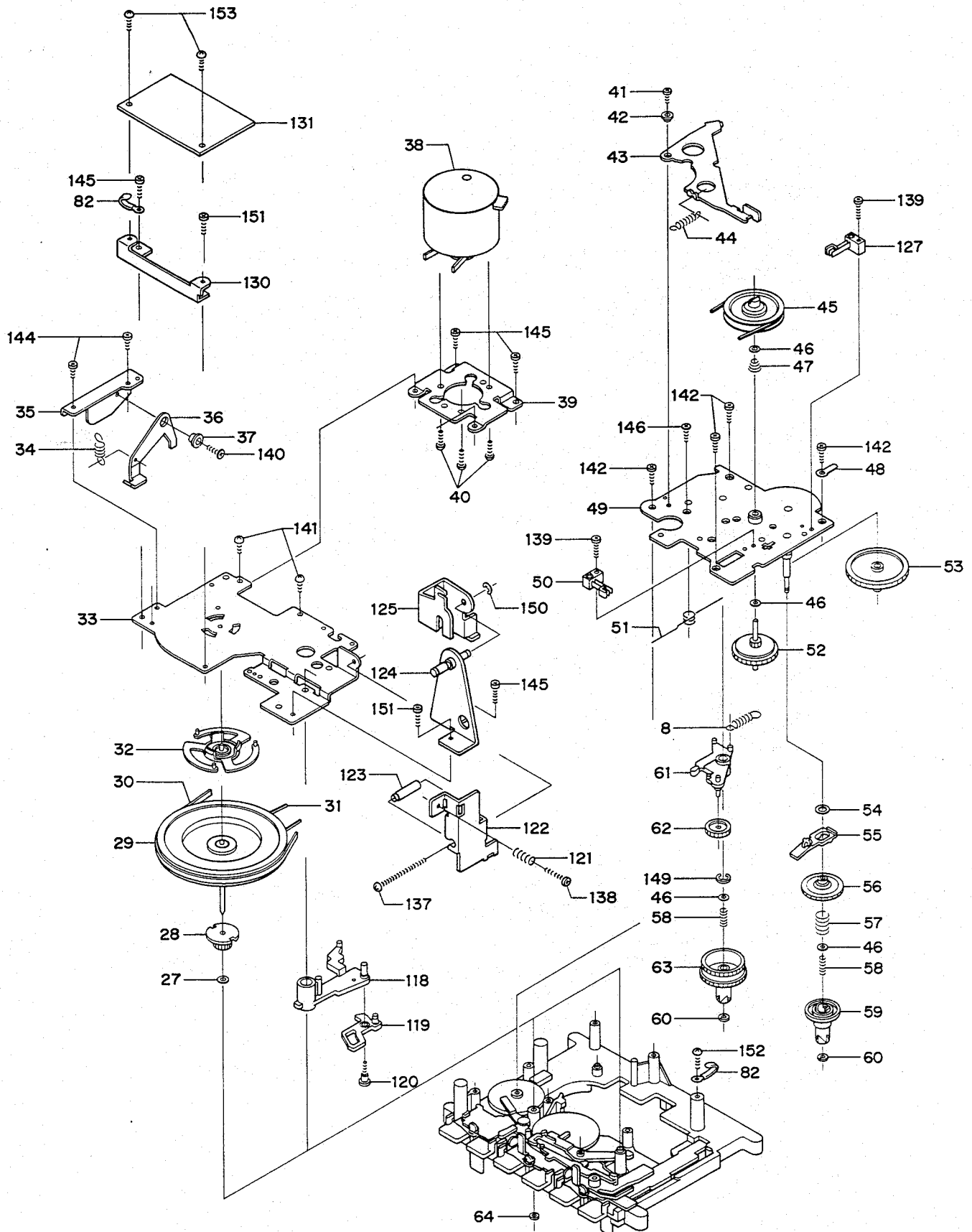
MECHANISM EXPLODED VIEW (Continued)

(Deck 2 Side Chassis Top)



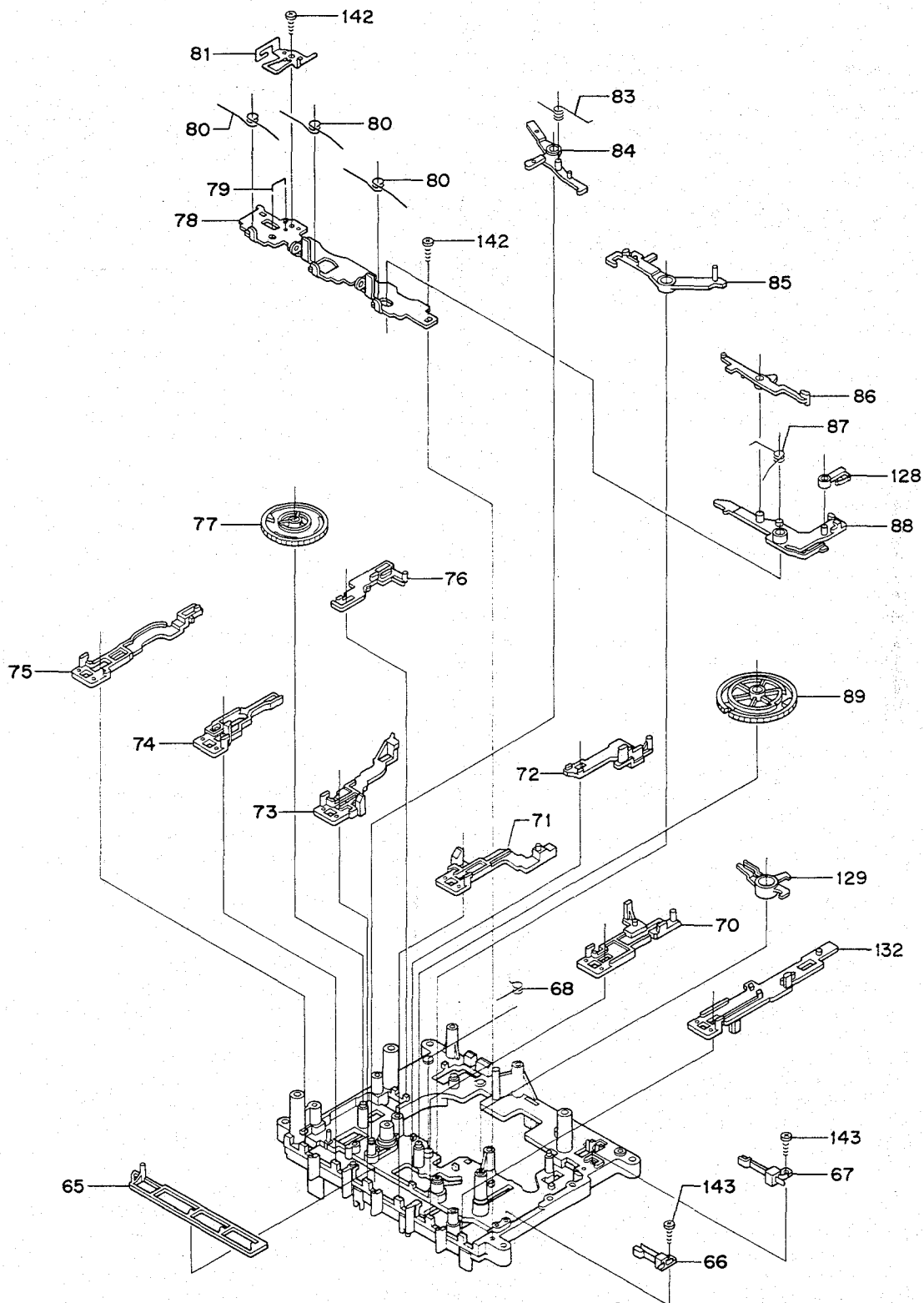
MECHANISM EXPLODED VIEW (Continued)

(Deck 2 Side Chassis Bottom 1)



MECHANISM EXPLODED VIEW (Continued)

(Deck 2 Side Chassis Bottom 2)



MECHANISM PARTS LIST

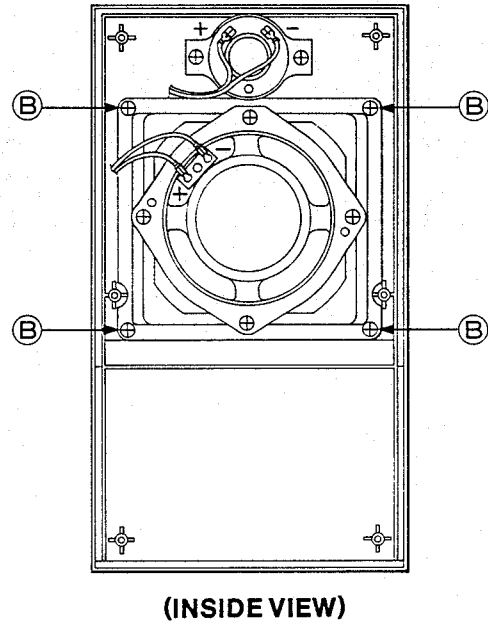
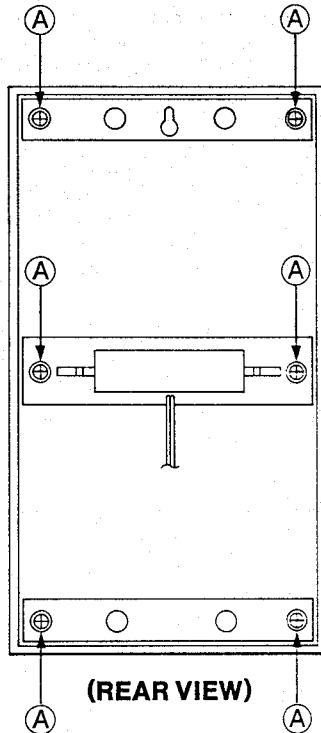
Ref. No.	Part No.	Description	Q'ty	Ref. No.	Part No.	Description	Q'ty
DECK 1 & 2 MECHANISM				61	141-2-7439-30000	Arm Fastwind	2
1	141-0-3119-21900	Chassis Assy	2	62	141-2-5519-45100	Gear Fastwind	2
2	141-2-7419-81300	Lever Cassette	2	63	141-2-5319-11500	Gear Reel Take-up	2
3	141-2-7419-80700	Lever Base Slide	2	64	141-2-4539-17600	Washer, M1.9x3.1x0.3	2
4	141-2-7319-52801	Base Slide	2	65	141-2-7319-53600	Plate Lock	2
5	141-2-4219-13201	Screw, Pan Hd. Tapping W/Washer +M2.0x6	4	66	4-2319-71863	Leaf Switch (Que/Rev, DECK 1) [S4]	1
6	141-2-3529-18102	Spacer Head	2	66	4-2319-71863	Leaf Switch	1
7	141-2-4219-30300	Screw, Bind Hd., +M2.0x6	8	67	4-2319-74550	Leaf Switch (Play Mute, DECK 1) [S1']	1
8	141-2-8519-64900	Spring Arm Gear	4	67	4-2319-74550	Leaf Switch (Play Mute, DECK 2) [S2']	1
9	141-2-8549-18700	Spring Slide Base	2	68	141-2-8529-12600	Spring Gear Actuate Play	2
10	141-2-3229-41601	Shield Plate Head	2	70	141-2-7319-53400	Rod Play	2
11	141-2-8559-00201	Spring Head	2	71	141-2-7319-53300	Rod Rewind	2
12	141-0-5419-02201	Pinch Roller Assy	2	72	141-2-7319-52900	Rod Switch	2
13	141-2-8529-12500	Spring Pinch Roller	2	73	141-2-7319-53200	Rod Fastwind	2
14	141-2-7149-05600	Brake Supply Reel	2	74	141-2-7319-53100	Rod Pause	2
15	141-2-7149-05700	Brake Take-up Reel	2	75	141-2-7319-53000	Rod Stop	2
16	141-2-8529-13200	Spring Sensor	2	76	141-2-7319-54900	Rod ASO	2
17	141-2-7419-80100	Lever ASO	2	77	141-2-5519-45800	Gear Actuate Pause	2
18	141-2-7439-30100	Arm Take-up	2	78	141-2-6139-14300	Frame Rod	2
19	141-2-5519-45300	Gear Take-up	2	79	141-2-8529-12800	Spring Pause Latch	2
20	141-2-8539-47901	Spring Cassette	2	80	141-2-8529-12401	Spring Rod FF	5
21	141-2-4219-05400	Screw Washer	4	81	141-2-8539-46700	Spring Plate Lock	2
22	141-2-7319-59200	Plate Eject	2	82	141-2-4729-04100	Lug	4
23	141-2-7419-81100	Lever Stop Eject	2	83	141-2-8529-13300	Spring Lever Pause	2
24	141-2-8549-18500	Spring Eject	2	84	141-2-7419-80600	Lever Pause Start	2
25	141-2-4469-49400	Cushion	2	85	141-2-7419-80500	Lever Play Start	2
26	141-2-7419-84400	Lock Lid Cassette	2	86	141-2-7419-80800	Lever Switch Cue Review	2
27	141-2-4539-20900	Washer, M2.1x5.0x0.19	2	87	141-2-8529-14200	Spring Stop Record	2
28	141-2-5519-45200	Gear Flywheel	2	88	141-2-7419-81000	Lever Stop Record	2
29	141-2-5219-15000	Flywheel Capstan	2	89	141-2-5519-45900	Gear Actuate Play	2
30	141-2-5619-01800	Belt	2	DECK 1 MECHANISM ONLY			
31	141-2-5649-21200	Belt Wind	2	95	4-2319-75860	Leaf Switch (Tape Select, DECK 1) [S3]	1
32	141-2-5739-06100	Thrust Flywheel	2	96	141-2-3529-46800	Spacer Head	1
33	141-2-3519-61400	Support Flywheel	2	97	4-2429-72191	Play Head [HD1]	1
34	141-2-8519-63600	Spring Bracket	2	98	4-2649-70622	Plunger	1
35	141-2-3519-68500	Bracket Eject	2	99	141-2-8529-14300	Spring Seesaw	1
36	141-2-7419-88900	Lever Eject	2	100	141-2-7419-81500	Lever Lock Button	1
37	141-2-3529-16000	Spacer Lever Select	2	101	141-2-7419-82700	Lever Plunger	1
38	141-0-3799-01100	Pulley Motor Assy [M1] [M2]	2	102	141-2-8549-04400	Spring Interlock	1
	4-5279-71230	Motor	1	103	141-2-5529-17000	Spindle Lever	1
	141-2-3799-04000	Pulley Motor	1	104	141-2-8529-24300	Spring Rod Play	1
39	141-2-3519-61500	Bracket Motor	2	105	131-2-3101-96400	Metal Mount	1
40	141-2-4219-17900	Screw, Pan Hd., +M2.6x2.7	6	106	131-2-3101-96300	Metal Mount	1
41	141-2-4219-03000	Screw, +M2.0x3	2	107	141-0-1939-10351	Bias OSC P.C.B. Assy	1
42	141-2-3529-36100	Spacer Lever	2	DECK 2 MECHANISM ONLY			
43	141-2-7419-82800	Lever Shut Off Switch	2	110	141-2-8419-11700	Interlock Lever	1
44	141-2-8519-61100	Spring Slide	2	111	141-0-7419-36900	Lever Record Base Assy	1
45	141-2-5519-45700	Pulley Friction	2	112	141-2-8259-11100	Roller Record	1
46	141-2-4539-27601	Washer, M2.1x3.5x0.13	8	113	141-2-4539-17500	Washer, M1.25x3.0x0.25	1
47	141-2-8559-04700	Spring Pulley	2	114	141-2-8549-05500	Spring Lever Stop	1
48	141-2-4729-03700	Lug	2	115	4-2429-72201	Erase Head [HD3]	1
49	141-0-3119-21800	Plate Chassis Assy	2	116	4-2429-72190	R/P Head [HD2]	1
50	4-2319-74362	Leaf Switch (Motor, DECK 1) [S1]	1	117	141-2-3529-35900	Spacer Head	1
50	4-2319-74362	Leaf Switch (Motor, DECK 2) [S2]	1	118	141-2-7419-81400	Arm Record	1
51	141-2-8529-12700	Spring Arm FF	2	119	141-2-7419-81200	Lever Record Select	1
52	141-0-5519-09600	Friction Assy	2	120	141-2-4219-23000	Screw, Tapping +M2.0x6	1
53	141-2-5519-45600	Gear ASO	2	121	141-2-8519-34000	Spring Adzimuth	1
54	141-2-4539-28001	Washer, M4.1x6.5x0.13	2	122	141-2-8419-13100	Lever R/P Switch	1
55	141-2-7419-80200	Lever Rewind	2	123	141-2-7539-23500	Post Lever R/P Switch	1
56	141-2-5319-11600	Gear Reel Supply	2	124	141-0-3519-23300	Bracket Record Assy	1
57	141-2-8519-67900	Spring Reel	2	125	141-2-7419-89000	Lever Spring Record	1
58	141-2-8559-00100	Spring Supply	4	127	4-2319-74360	Leaf Switch (Record, DECK 2) [S5]	1
59	141-2-5319-11700	Fin Reel Supply	2				
60	141-2-4539-15700	Washer, M1.5x3.5x0.4	4				

MECHANISM PARTS LIST (Continued)

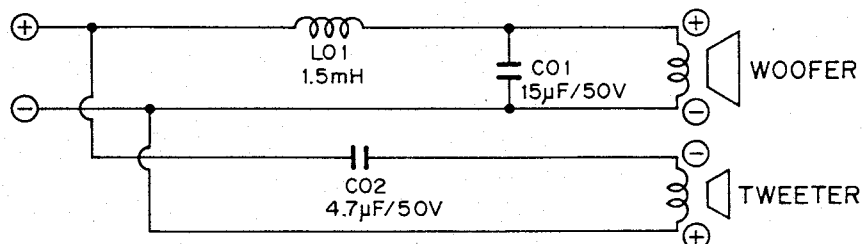
Ref. No.	Part No.	Description	Q'ty	Ref. No.	Part No.	Description	Q'ty
128	141-2-7419-80900	Lever Spring Stop Record	1	151	143-3-1702-60611	Screw, Bind Hd. Tapping-B, +M2.6x6	2
129	141-2-7419-80400	Lever Lock Record	1	152	143-3-1702-61011	Screw, Bind Hd. Tapping-B, +M2.6x10	2
130	141-2-3779-22500	Bracket P.C.B.	1	153	143-3-1903-00611	Screw, Brazier Hd. Tapping-B, +M3.0x6	5
131	141-0-1939-12170	Muting P.C.B. Assy	1	154	143-3-1702-00811	Screw, Bind Hd. Tapping-B, +M2.0x8	1
132	141-2-7319-53500	Rod Record	1				
SCREW & E RING PARTS LIST				DECK 1 PARTS LIST			
136	101-3-1302-00811	Screw, Pan Hd., +M2.0x8	1	C1	CD2-2-6160-0001V	Electrolytic 22μF 16V	1
137	101-3-1302-62511	Screw, Pan Hd., +M2.6x25	1	CA3	4-2359-76746	Connector 4P Assy [PL1W]	1
138	101-3-1703-01211	Screw, Bind Hd., +M3.0x12	1	CA9	4-2359-76739	Connector 7P Assy [PL3W]	1
139	101-3-1702-00811	Screw, Bind Hd., +M2.0x8	3				
140	101-3-1202-60618	Screw, Flat Hd., +M2.6x6	2	DECK 2 PARTS LIST			
141	103-3-1302-60511	Screw, Pan Hd. Tapping-2, +M2.6x5	4	C2	CD2-2-6160-0001V	Electrolytic 22μF 16V	1
142	143-3-1702-00618	Screw, Bind Hd. Tapping-B, +M2.0x6	11	CA1	4-2359-76608	Connector 6P Assy [PL2W]	1
143	143-3-1702-00818	Screw, Bind Hd. Tapping-B, +M2.0x8	5	CA2	4-2359-76788	Connector 2P Assy [PL702]	1
144	143-3-1702-60618	Screw, Bind Hd. Tapping-B, +M2.6x6	7	CA10	4-2359-77326	Connector 8P Assy [PL4W]	1
145	143-3-1702-61018	Screw, Bind Hd. Tapping-B, +M2.6x10	8				
146	143-3-1202-00818	Screw, Flat Hd. Tapping-B, +M2.0x8	2				
147	112-3-1301-20082	E Ring, M1.2	1				
148	112-3-1302-00082	E Ring, M2.0	2				
149	112-3-1303-00082	E Ring, M3.0	2				
150	112-3-1301-50082	E Ring, M1.5	1				
				NOTES:			
				1. Parts order must contain Model Number, Part Number and Description.			
				2. Ordering quantity of screws and resistors must be multiple of 10 pcs.			

REPLACING THE SPEAKER UNIT (STE-M22)

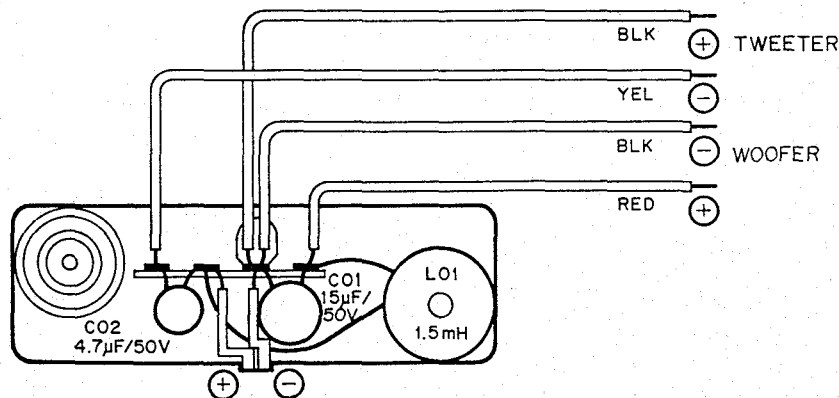
1. Remove the six screws (A) on the rear side of the unit and detach Baffle Assy.
2. Remove the wires connected to the speaker terminals.
3. When you replace Woofer, remove the four screws (B) and detach Woofer. Do not remove other screws.



SPEAKER SCHEMATIC DIAGRAM



SPEAKER POINT TO POINT WIRING DIAGRAM

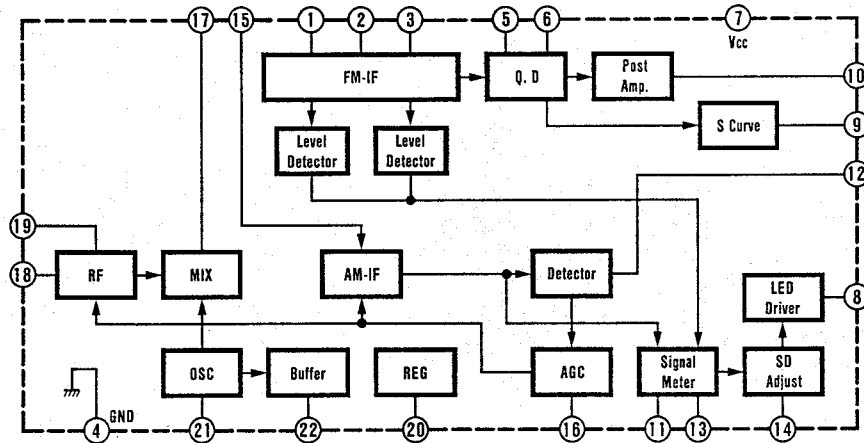


SPEAKER PARTS LIST

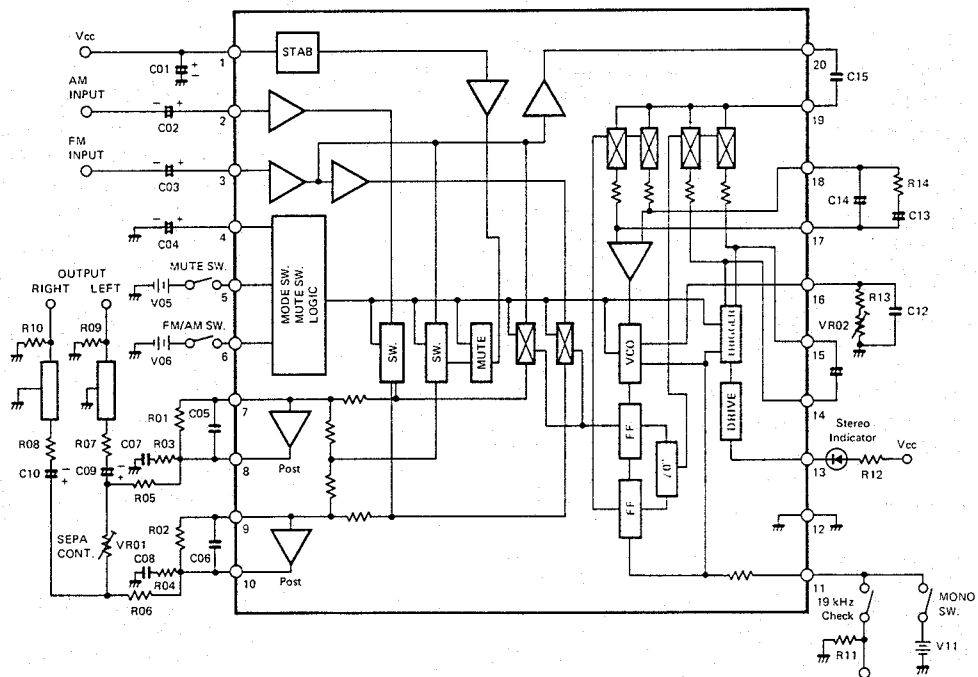
Ref. No.	Part No.	Description	Q'ty	Ref. No.	Part No.	Description	Q'ty
PACKING PARTS LIST							
	131-6-2119-02082	Bag Polyethylene-Exp.	2		141-0-1119-98821	Speaker Box Assy (White)	1
	141-6-3219-00300	Patching Sheet	2		141-0-1149-11721	Baffle Assy	1
	141-6-1449-92700	Case Styroform	2		141-2-1519-40701	Frame	1
	141-6-1139-99209	Box Corrugate-Exp. (Black)	1		141-2-1519-45401	Sheet	2
	141-6-1139-99210	Box Corrugate-Exp. (Red)	1		141-2-2449-49101	Net	1
	141-6-1139-99211	Box Corrugate-Exp. (White)	1		141-2-2449-49201	Net	1
	142-6-4119-32416	Explanatory Booklet	1		141-2-2529-07021	Mount Baffle	1
					141-2-4419-20300	NW Cloth	6
					141-2-4419-20400	NW Cloth	2
					141-2-1129-00300	Enclosure-Speaker	1
SPEAKER BOX PARTS LIST							
	141-0-1119-98819	Speaker Box Assy (Black)	1		141-2-3529-41300	Spacer	1
	141-0-1149-11719	Baffle Assy	1		141-2-3529-41500	Spacer	1
	141-2-1519-40701	Frame	1		141-2-4219-13400	Screw	6
	141-2-1519-45400	Sheet	2		143-3-1903-00611	Screw, Brazier Hd. Tapping-2, +M3.0x6	2
	141-2-2449-49101	Net	1		143-3-1903-01011	Screw, Brazier Hd. Tapping-2, +M3.0x10	4
	141-2-2449-49201	Net	1	ELECTRICAL PARTS LIST			
	141-2-2529-07019	Mount Baffle	1		4-1519-71781	Speaker (Woofer)	1
	141-2-4419-20300	NW Cloth	6		4-1519-71790	Speaker (Tweeter)	1
	141-2-4419-20400	NW Cloth	2		141-0-1939-02708	Network Assy	1
	141-2-1129-00302	Enclosure-Speaker	1		4-2359-76783	Connector 2P Assy	1
					4-2359-76784	Connector 2P Assy	1
					4-2372-00230	Terminal Lug 1-3PR	1
					4-2439-72130	Wire 2 Parallel	1
					102-3-1903-00611	Screw, Brazier Hd. Tapping-1, +M3.0x6	1
					141-2-3529-41406	Spacer	1
							</

IC EQUIVALENT CIRCUIT & BLOCK DIAGRAM

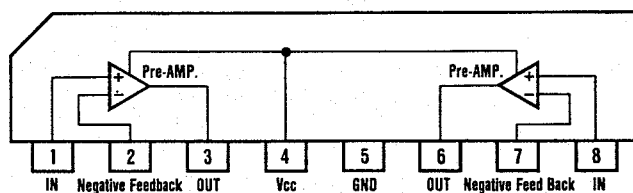
AM RF IF / FM IF IC LA 1265



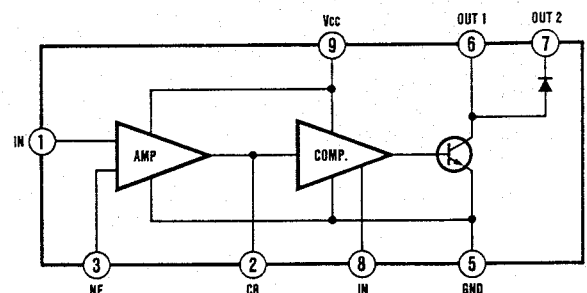
FM MPX AM/FM SWITCH IC LA 3390



PLAYBACK AMP IC LA 3160 T

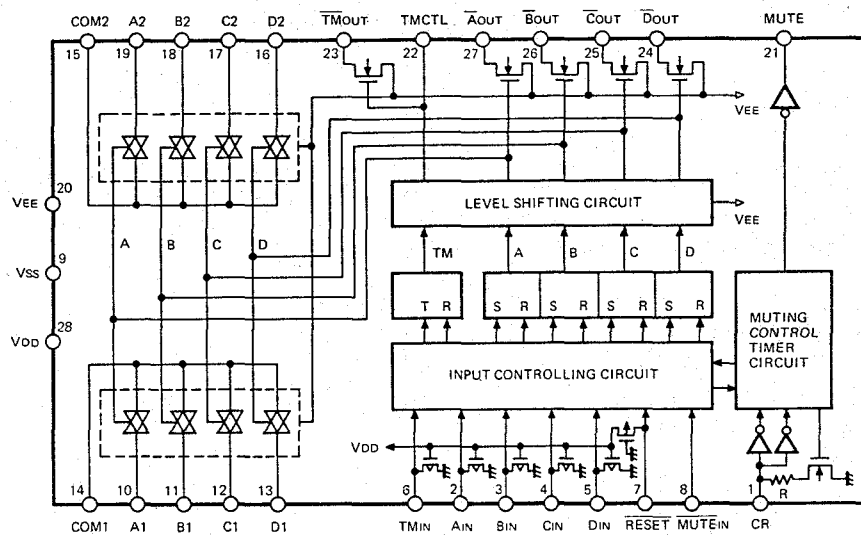


ASF SENSOR IC LA 2000

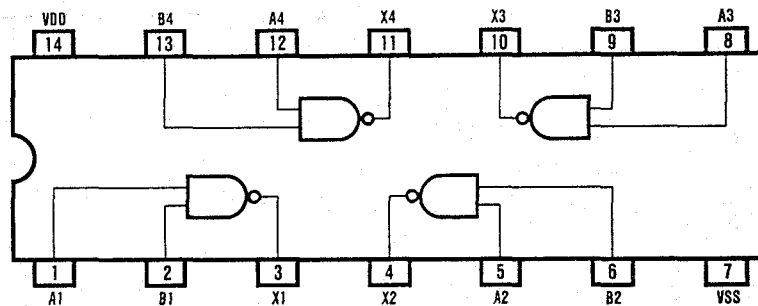


IC EQUIVALENT CIRCUIT & BLOCK DIAGRAM (Continued)

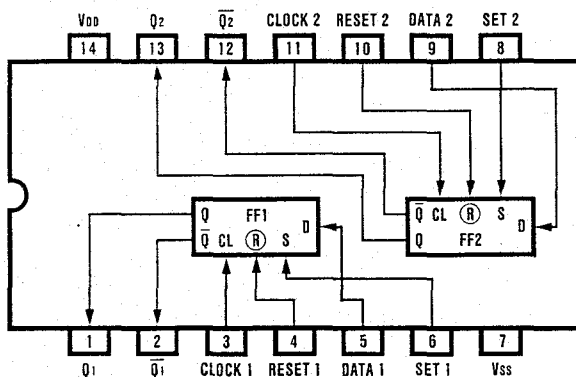
FUNCTION SELECTOR IC LC 7815 H



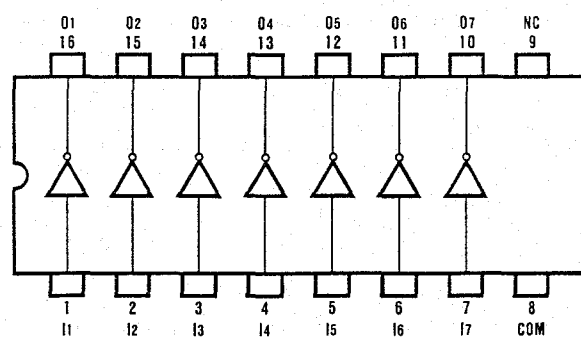
QUAD 2 – INPUT NAND GATE IC TC 4011 BP



DUAL D-TYPE FLIP-FLOP IC LC 4913 B

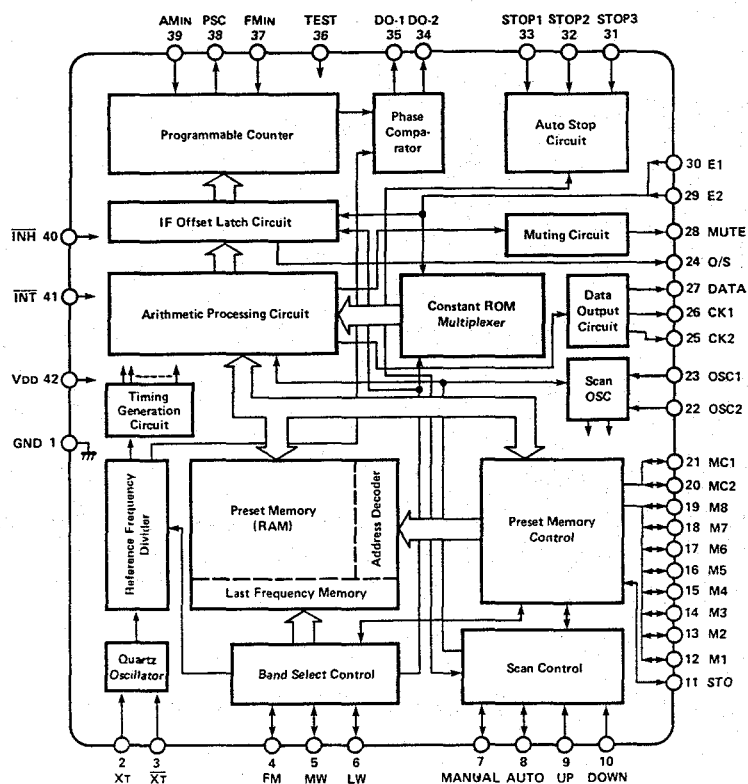


RECORD AMP IC TD 62504 P

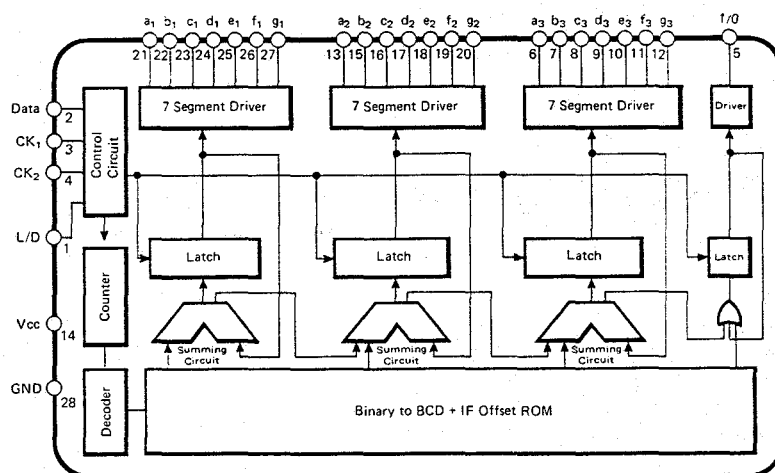


IC EQUIVALENT CIRCUIT & BLOCK DIAGRAM (Continued)

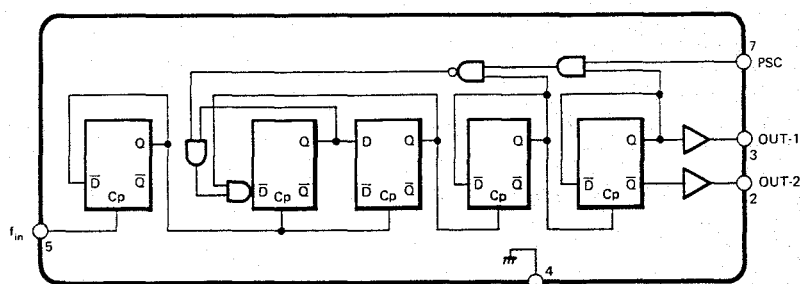
PLL CONTROL IC TC 9147 BP



STATIC DRIVER IC TD 6301 AP

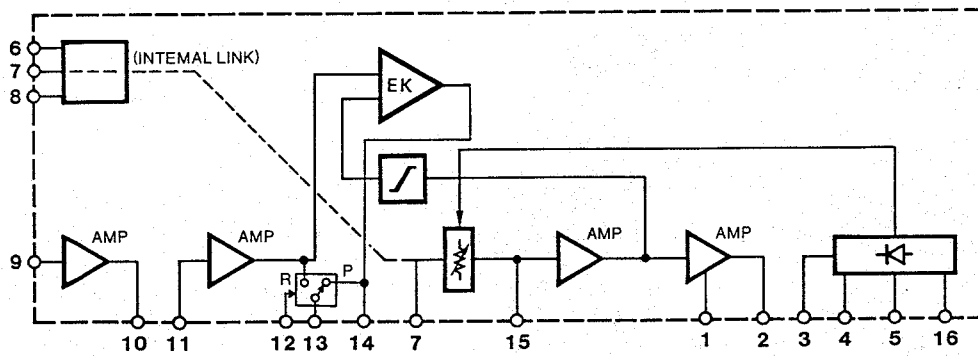


PRE SCALAR IC TD 6104 P

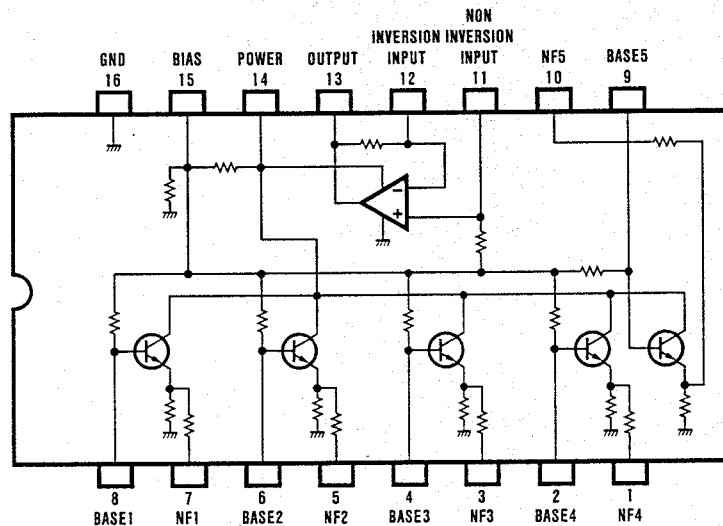


IC EQUIVALENT CIRCUIT & BLOCK DIAGRAM (Continued)

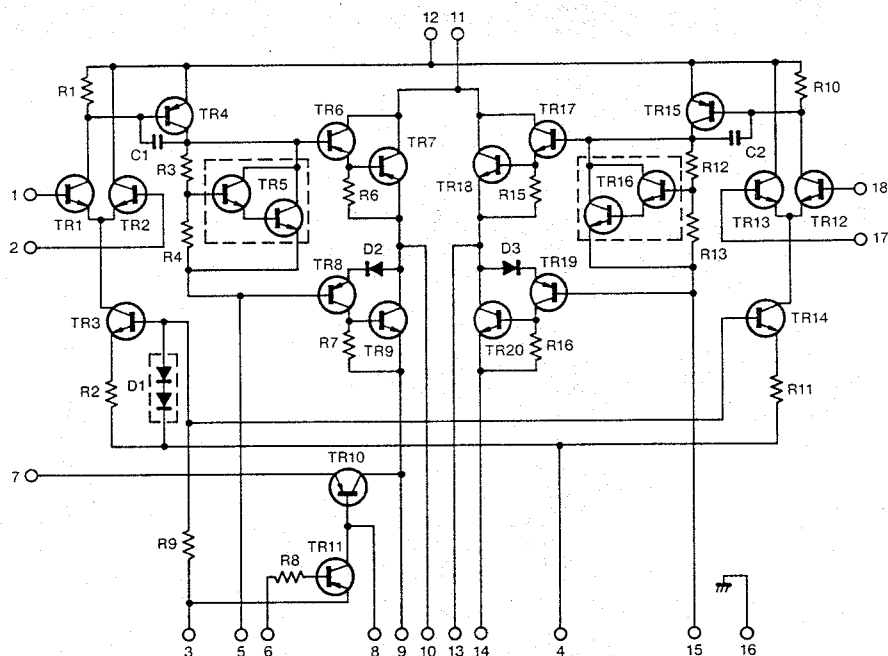
DOLBY NR B-TYPE IC TA 7403 P



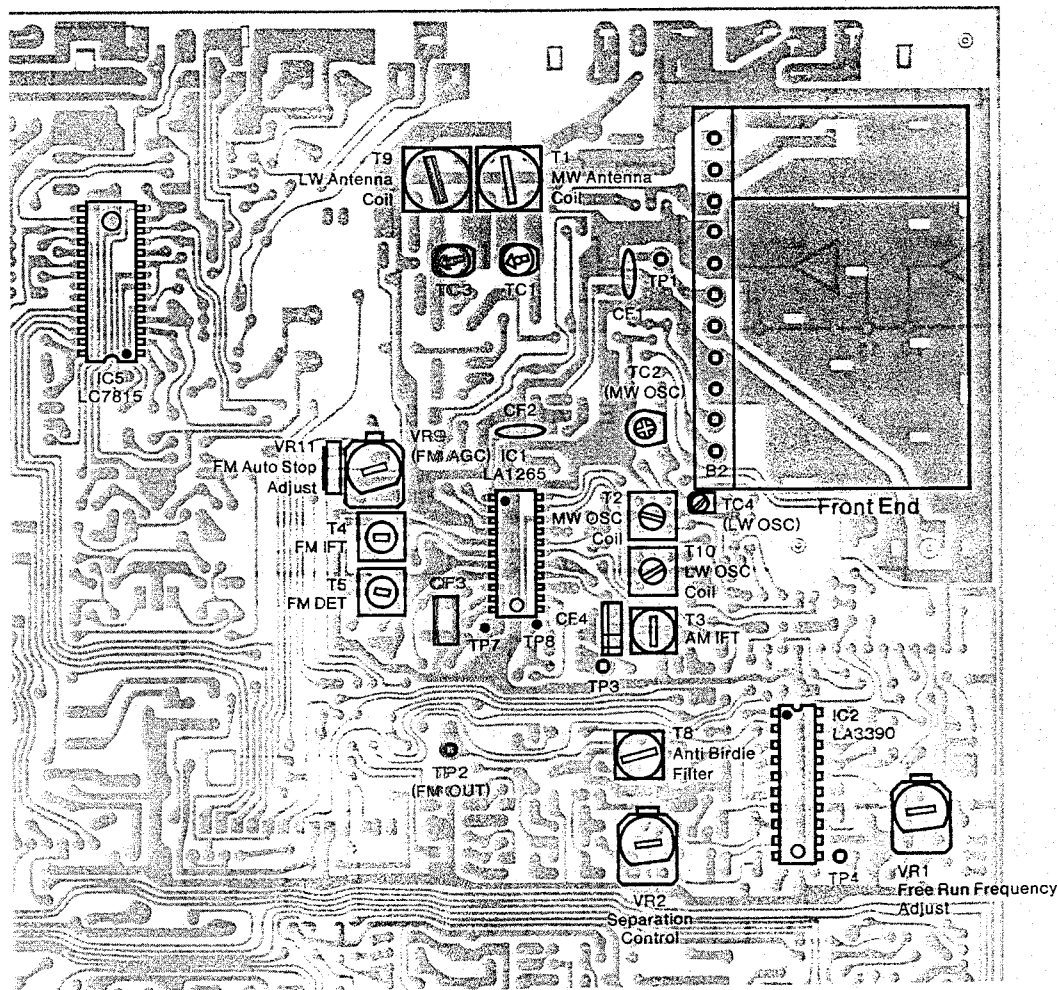
GRAPHIC EQ AMP IC M 5226 P



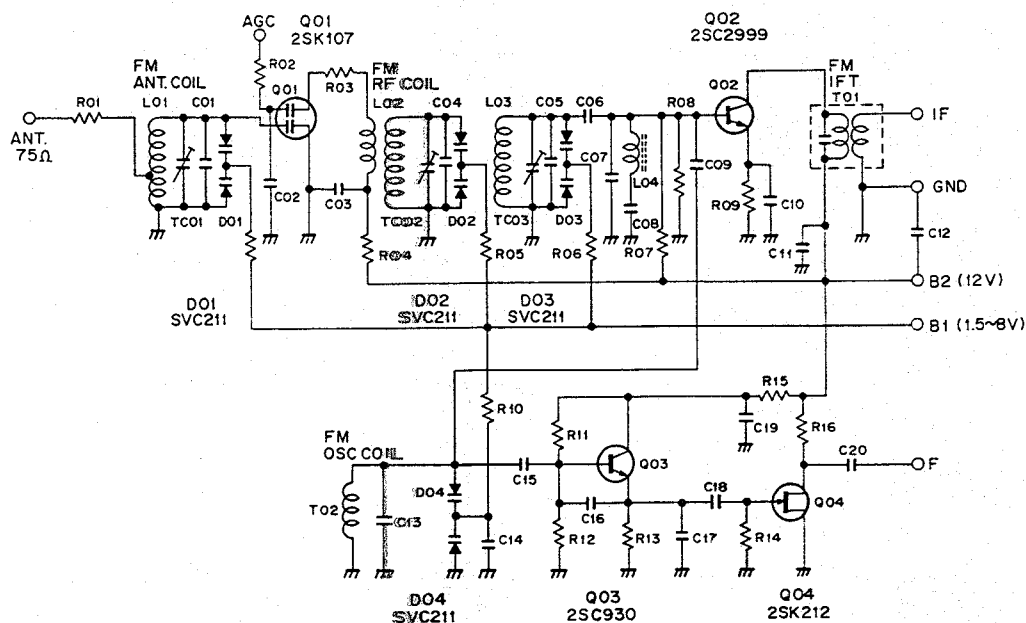
POWER AMPLIFIER IC STK 4131 II



PRINTED CIRCUIT BOARD ALIGNMENT POINTS (TUNER SECTION TOP VIEW)



FRONT END SCHEMATIC DIAGRAM



AM TUNER ALIGNMENT

AM ALIGNMENT – FUNCTION switch to AM position.
Maintain generator output as low as possible for suitable indication.

ITEM	GENERATOR	DIAL SETTING	INDICATOR	PROCEDURE
1. AM IF ALIGNMENT	Connect 450kHz Radio IF Genescope output to AM Antenna Terminal and ground lead to chassis.	Position of non-interference. Minimum Frequency.	Connect Radio IF Genescope input to TP3 and ground lead to chassis.	Adjust AM IFT (T3) for maximum gain and best symmetry. Keep signal low enough for noise on response
2. MW (RF) FREQUENCY COVER ALIGNMENT (1611kHz)	Do not connect generator.	Front Panel DIGITAL Counter Display Set to 1611kHz.	Connect DC Voltmeter to Front End B2 terminal and ground lead to chassis.	Adjust MW OSC Trimmer (TC2) until DC Voltmeter reads $8.0 \pm 0.1V$.
3. (522kHz)	Same as above.	DIGITAL Counter Display Set to 522kHz.	Same as above.	Adjust MW OSC Coil (T2) until DC VTVM reads $1.2 \pm 0.05V$.
4. LW (RF) FREQUENCY COVER ALIGNMENT (360kHz)	Same as above.	DIGITAL Counter Display Set to 360kHz.	Same as above.	Adjust LW OSC Trimmer (TC4) until DC Voltmeter reads $8.0 \pm 0.1V$.
5. (153kHz)	Same as above.	DIGITAL Counter Display Set to 153kHz.	Same as above.	Adjust LW OSC Coil (T10) until DC Voltmeter reads $1.2 \pm 0.05V$.
6. MW (RF) TRACKING ALIGNMENT (1404kHz)	Connect Standard Loop Antenna to output terminal of AM RF Signal Generator. Place Loop Antenna 60cm away from Ber Antenna. Generator Setting to 1404kHz and 603kHz. Modulate with 400Hz (30 % modulation).	DIGITAL Counter Display Set to 1404kHz.	Connect VTVM and Oscilloscope to Speaker terminal and ground lead to chassis.	Adjust MW ANT Trimmer (TC1) for maximum gain output.
7. (603kHz)		DIGITAL Counter Display Set to 603kHz.	Same as above.	Adjust MW Antenna Coil (T1) for maximum gain output.
Note: Repeat the adjustments in Items 6 and 7. Then, confirm there is no tracking error.				
8. LW (RF) TRACKING ALIGNMENT (350kHz)	Same as above. Change generator setting to 350 kHz.	DIGITAL Counter Display Set to 350kHz.	Connect VTVM and Oscilloscope to Speaker terminal and ground lead to chassis.	Adjust LW ANT Trimmer (TC3) for maximum gain output.
9. (160kHz)	Change generator setting to 160kHz.	DIGITAL Counter Display Set to 160kHz.	Same as above.	Adjust LW Antenna Coil (T9) for maximum gain output.
Note: Repeat the adjustments in Items 8 and 9. Then, confirm there is no tracking error.				
10. AM AUTO STOP SENSITIVITY ADJUSTMENT	Change generator setting to 1008kHz and output level to 65dB/m.	Set to 1008kHz.		Adjust VR10, so that Auto Stop Function works at 1008kHz on DIGITAL Counter Display.

Use a screwdriver with plastic grip for all adjustments.

CAUTION: This precision high-fidelity instrument should be serviced only by qualified personnel, trained in the repair of transistor equipment and printed circuitry.

FM TUNER ALIGNMENT

FM ALIGNMENT – FUNCTION switch to FM STEREO Position.
Note: It is almost unnecessary to adjust coil in Front End as perfectly adjusted.

ITEM	GENERATOR	DIAL SETTING	INDICATOR	PROCEDURE
Note: The FM IF circuit utilizes a non-turnable ceramic filter which establishes the IF bandpass. To insure symmetrical turning and selectivity, the IF must be aligned precisely to the center of the filter bandpass, rather than to 10.7MHz as in conventional LC circuits.				
1. FM IF S-CURVE ALIGNMENT	Connect 10.7MHz Radio IF Genescope output to TP1 and ground lead to chassis. Use 2pF capacitor in series with generator output lead.	Position of non-interference Minimum Frequency.	Connect Radio IF Genescope input to TP2 and ground lead to chassis.	Adjust FM DET (T5), so that S-wave form becomes symmetrical.
2. FM RF FREQUENCY COVER ALIGNMENT (108MHz)	Connect FM RF Signal Generator through FM Dummy Antenna to FM Antenna terminals. Set Generator to 108MHz and 87.5MHz. Modulate with 1kHz to provide ± 40 kHz deviation. Set Generator output with attenuator as low as possible.	Front Panel DIGITAL Counter Display Set to 108MHz.	Connect DC Voltmeter to Front End B2 terminal and ground lead to chassis.	Check the DC Voltmeter reads $8.5V \pm 0.1V$.
3. (87.5MHz)		DIGITAL Counter Display Set to 87.5MHz.	Same as above.	Check the DC Voltmeter reads $1.4V \sim 1.5V$.
Note: Repeat the adjustments in Items 2 and 3. Then, confirm there is no tracking error.				
4. FM IFT ALIGNMENT	Change Signal Generator Setting to $98MHz \pm 2kHz$. Adjust Attenuator output for $60dB\mu$.	DIGITAL Counter Display Set to 98MHz.	Connect VTVM and Oscilloscope to Speaker Terminal and ground lead to chassis.	Adjust FM IFT (T4) for maximum gain output.
5. DETECTOR ALIGNMENT	Same as above.	Same as above.	Same as above.	Adjust FM DET (T5) for minimum gain and best linearity.
6. FM AGC ALIGNMENT	Same as above.	Same as above.	Connect DC Voltmeter to Front End AGC terminal and ground lead to chassis.	Adjust VR9 until Voltmeter reads $100mV \pm 10\%$.
7. FM AUTO STOP SENSITIVITY ADJUSTMENT	Change Attenuator output level to $18dB\mu$.	Same as above.	Connect DC Voltmeter to VR11 terminal and ground lead to chassis.	Adjust VR11 until Voltmeter reads $0.9V \begin{smallmatrix} +0.05V \\ -0 \end{smallmatrix}$.
8. PLL IC FREE RUN FREQUENCY ADJUSTMENT (19kHz)	Same as above.	Same as above.	Connect Frequency Counter to TP4 and ground terminal.	Adjust VR1 in multiplex circuit to obtain $19kHz \pm 50Hz$ on Frequency Counter. (Use $100k\Omega$ Resistor in series with Frequency Counter lead.)
9. FM STEREO SIGNAL SEPARATION CONTROL	Connect FM Stereo SG to FM Antenna terminals. 19kHz signal ON. Main channel, sub channel signal ON. Apply 1000Hz signal from LEFT channel.		Scope and VTVM to Right Speaker Terminal output.	Adjust VR02 for minimum output.
	Same as above for RIGHT channel.		Scope and VTVM to Left Speaker Terminal output.	

Use a screwdriver with plastic grip for all adjustments.

P.C.BOARD PARTS LIST

Ref. No.	Part No.	Description	Q'ty	Ref. No.	Part No.	Description	Q'ty
AF/RF P.C.B. ASSY				PL15K	4-2369-75580	Plug 5P	1
59	141-0-1939-10281	AF/RF P.C.B. Assy	1	PL16W	4-2369-71482	Connector 3P	1
	4-2262-23051	AF/RF P.C.B.	1	PL17K	4-2369-73970	Plug 3P	1
	4-1252-00331	FM Front End	1	J401	4-2439-72742	Wire 5 Parallel	1
	(Component parts used in Front End are not serviceable and available.)			J501	4-2439-72735	Wire 6 Parallel	1
	4-2352-00220	Fuse Clip	14	JK1	4-2352-00410	RCA Socket 1P	1
	4-2369-75590	RT Pin	2	JK2	4-2352-01750	Pin Jack 2P (CD Input)	1
	4-2379-21520	Terminal Lug	2	JK3	4-2359-78630	Jack 3P (Synchro Rec)	1
	4-2379-70820	4P Push Terminal (Speakers)	1	JK4	4-2359-76800	DIN Socket 8P (Phono Input)	1
	4-2379-71020	Terminal 4P (Antenna)	1	CA901	4-2359-78409	Connector 4P Assy	1
S201	4-2319-78350	Slide Switch 10 (Record/Play)	1		111-2-6220-11100	Wire Wrap Terminal	20
F1	△ 4-2349-20580	Fuse T3.15A	1		131-2-6201-21500	Plate Heat Sink (for Q604)	1
F2	△ 4-2349-20580	Fuse T3.15A	1		131-2-6201-35200	Plate Heat Sink (for Q606, Q607)	1
F3	△ 4-2349-20240	Fuse T1.6A	1	CAPACITORS			
F4	△ 4-2349-20240	Fuse T1.6A	1	C1	CC5-0-A500-CCH0C	Ceramic	5pF 50V ±0.2pF 1
F5	△ 4-2349-20240	Fuse T1.6A	1	C2	CC1-0-1500-KE01R	Ceramic	100pF 50V ±10% 1
F6	△ 4-2349-20590	Fuse T4.0A	1	C3	CI1-0-3160-NG01R	Boundary	0.01μF 16V ±30% 1
F7	△ 4-2349-20590	Fuse T4.0A	1	C4	CC2-2-3500-ZG00C	Ceramic	0.022μF 50V +80,-20% 1
VR1	4-2222-01400	Potentiometer (B-10kΩ)	1	C5	CI2-2-3160-NG00R	Boundary	0.022μF 16V ±30% 1
VR2	4-2222-01040	Potentiometer (B-20kΩ)	1	C6	CC2-2-3500-ZG00C	Ceramic	0.022μF 50V +80,-20% 1
VR3	4-2222-01010	Potentiometer (B-50kΩ)	1	C8	CS4-3-1500-J000V	Polystyrol	430pF 50V ±5% 1
VR4	4-2222-01010	Potentiometer (B-50kΩ)	1	C9	CD4-7-6160-0001V	Electrolytic	47μF 16V 1
VR5	4-2222-01010	Potentiometer (B-50kΩ)	1	C10	CC2-2-3500-ZG00C	Ceramic	0.022μF 50V +80,-20% 1
VR6	4-2222-01010	Potentiometer (B-50kΩ)	1	C11	CC2-2-3500-ZG00C	Ceramic	0.022μF 50V +80,-20% 1
VR7	4-2222-01400	Potentiometer (B-10kΩ)	1	C13	CI4-7-3250-MF00C	Boundary	0.047μF 25V ±20% 1
VR8	4-2222-01400	Potentiometer (B-10kΩ)	1	C14	CI4-7-3250-MF00C	Boundary	0.047μF 25V ±20% 1
VR9	4-2222-01020	Potentiometer (B-200kΩ)	1	C15	CI4-7-3250-MF00C	Boundary	0.047μF 25V ±20% 1
VR11	4-2229-73061	Potentiometer (B-50kΩ)	1	C16	CD1-0-5500-0001V	Electrolytic	1μF 50V 1
TC1	4-2249-70581	Trimmer Condenser 10pF	1	C17	CD1-0-6160-0001V	Electrolytic	10μF 16V 1
TC2	4-2249-70581	Trimmer Condenser 10pF	1	C18	CD1-0-6160-0001V	Electrolytic	10μF 16V 1
TC3	4-2242-00280	Trimmer 20pF	1	C19	CI2-2-3160-NG00R	Boundary	0.022μF 16V ±30% 1
TC4	4-2249-70812	Trimmer Condenser	1	C21	CD3-3-5250-0002V	Electrolytic	3.3μF 25V 1
CF1	4-2272-00021	Ceramic Filter 10.7MHz	1	C22	CD1-0-6160-0001V	Electrolytic	10μF 16V 1
CF2	4-2272-00021	Ceramic Filter 10.7MHz	1	C23	CC2-2-3500-ZG00C	Ceramic	0.022μF 50V +80,-20% 1
CF4	4-2272-00340	Ceramic Filter	1	C24	CM1-0-3500-J00SV	Mylar	0.01μF 50V ±5% 1
L2	4-2552-00550	Coil (33mH)	1	C25	CD4-7-6160-0001V	Electrolytic	47μF 16V 1
L3	4-2552-00550	Coil (33mH)	1	C26	CC3-3-0500-JD01R	Ceramic	33pF 50V ±5% 1
L4	4-2532-00470	Choke Coil (470μH)	1	C27	CD1-0-7160-0001V	Electrolytic	100μF 16V 1
TRP1	4-2559-70250	Bias Trap Coil	1	C28	CD1-0-4500-0001V	Electrolytic	0.1μF 50V 1
TRP2	4-2559-70250	Bias Trap Coil	1	C29	CD1-0-6160-0001V	Electrolytic	10μF 16V 1
T1	4-2599-71260	MW ANT Coil	1	C30	CD1-0-5500-0001V	Electrolytic	1μF 50V 1
T2	4-2589-73020	MW OSC Coil	1	C31	CM1-0-2500-K00SV	Mylar	0.001μF 50V ±10% 1
T3	4-2569-71910	AM IFT Coil	1	C32	CM1-0-2500-K00SV	Mylar	0.001μF 50V ±10% 1
T4	4-2569-71920	Quad Rature Coil	1	C33	CI1-0-3160-NG01R	Boundary	0.01μF 16V ±30% 1
T5	4-2569-71930	Quad Rature Coil	1	C34	CI1-0-3160-NG01R	Boundary	0.01μF 16V ±30% 1
T6	4-2729-70810	Dolby Filter	1	C35	CD1-0-6500-0001V	Electrolytic	10μF 50V 1
T7	4-2729-70810	Dolby Filter	1	C36	CD1-0-6500-0001V	Electrolytic	10μF 50V 1
T8	4-2529-70320	Anti Birdie Filter	1	C37	CC1-0-2500-KE01R	Ceramic	0.001μF 50V ±10% 1
T9	4-2599-71270	LW ANT Coil	1	C38	CI4-7-3250-MF00C	Boundary	0.047μF 25V ±20% 1
T10	4-2589-73030	LW OSC Coil	1	C39	CD3-3-5500-0001V	Electrolytic	3.3μF 50V 1
PL1W	4-2369-71851	Connector 4P	1	C40	CD2-2-5500-0001V	Electrolytic	2.2μF 50V 1
PL2W	4-2369-71452	Connector 6P	1	C41	CP1-0-2500-J003V	Polypropylen	0.001μF 50V ±5% 1
PL3W	4-2369-73410	Connector 7P	1	C42	CD1-0-5500-0001V	Electrolytic	1μF 50V 1
PL4W	4-2362-00900	Plug 8P	1	C43	CC3-9-1500-KE01R	Ceramic	390pF 50V ±10% 1
PL5W	4-2369-73130	Connector 3P	1	C44	CC3-9-1500-KE01R	Ceramic	390pF 50V ±10% 1
PL6W	4-2369-73150	Connector 5P	1	C45	CI5-6-2160-NF01R	Boundary	0.0056μF 16V ±30% 1
PL7W	4-2369-74300	Plug 10P	1	C46	CI5-6-2160-NF01R	Boundary	0.0056μF 16V ±30% 1
PL8W	4-2369-74300	Plug 10P	1	C47	CD1-0-6160-0001V	Electrolytic	10μF 16V 1
PL9W	4-2369-73130	Connector 3P	1	C48	CD1-0-6160-0001V	Electrolytic	10μF 16V 1
PL10R	4-2369-75570	Plug 3P	1	C49	CD3-3-7160-0006V	Electrolytic	330μF 16V 1
PL11W	4-2362-00770	Plug 2P	1	C50	CI4-7-3250-MF00C	Boundary	0.047μF 25V ±20% 1
PL12W	4-2369-73140	Connector 4P	1	C51	CD4-7-5250-0001V	Electrolytic	4.7μF 25V 1
PL14W	4-2369-73140	Connector 4P	1	C61	CD1-0-5500-0001V	Electrolytic	1μF 50V 1

P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty	Ref. No.	Part No.	Description	Q'ty
C62	CC2-2-3500-ZG00C	Ceramic	0.022μF 50V +80,-20%	1	C413	CD1-0-5500-0001V	Electrolytic 1μF 50V 1
C63	CS4-3-1500-J000V	Polystyroul	430pF 50V ±5%	1	C414	CD1-0-6160-0001V	Electrolytic 10μF 16V 1
C64	CC2-2-3500-ZG00C	Ceramic	0.022μF 50V +80,-20%	1	C415	CD1-0-5500-0001V	Electrolytic 1μF 50V 1
C65	CC2-2-3500-ZG00C	Ceramic	0.022μF 50V +80,-20%	1	C416	CD2-2-6160-0001V	Electrolytic 22μF 16V 1
C67	CD1-0-4500-0001V	Electrolytic	0.1μF 50V	1	C417	CD2-2-6160-0001V	Electrolytic 22μF 16V 1
C68	CD2-2-5500-0001V	Electrolytic	2.2μF 50V	1	C418	CD4-7-5250-0001V	Electrolytic 4.7μF 25V 1
C69	CS3-3-1500-J000V	Polystyroul	330pF 50V ±5%	1	C501	CD2-2-7160-0006V	Electrolytic 220μF 16V 1
C70	CI4-7-3250-MF00C	Boundary	0.047μF 25V ±20%	1	C502	CD2-2-7160-0006V	Electrolytic 220μF 16V 1
C71	CC3-3-0500-JCH0C	Ceramic	33pF 50V ±5%	1	C503	CD2-2-7160-0006V	Electrolytic 220μF 16V 1
C72	CD1-0-4500-0001V	Electrolytic	0.1μF 50V	1	C504	CD2-2-7160-0006V	Electrolytic 220μF 16V 1
C73	CD3-3-5250-0002V	Electrolytic	3.3μF 25V	1	C505	CD4-7-4500-0001V	Electrolytic 0.47μF 50V 1
C74	CC4-7-0500-JD01R	Ceramic	47pF 50V ±5%	1	C506	CD4-7-4500-0001V	Electrolytic 0.47μF 50V 1
C201	CC1-0-2500-KE01R	Ceramic	0.001μF 50V ±10%	1	C507	CM3-9-2500-K00SV	Mylar 0.0039μF 50V ±10% 1
C202	CC1-0-2500-KE01R	Ceramic	0.001μF 50V ±10%	1	C508	CM3-9-2500-K00SV	Mylar 0.0039μF 50V ±10% 1
C203	CD1-0-6160-0001V	Electrolytic	10μF 16V	1	C509	CD1-0-6160-0001V	Electrolytic 10μF 16V 1
C204	CD1-0-6160-0001V	Electrolytic	10μF 16V	1	C510	CD1-0-6160-0001V	Electrolytic 10μF 16V 1
C205	CD1-0-763A-0001V	Electrolytic	100μF 6.3V	1	C511	CD1-0-6160-0001V	Electrolytic 10μF 16V 1
C206	CD1-0-763A-0001V	Electrolytic	100μF 6.3V	1	C512	CD1-0-6160-0001V	Electrolytic 10μF 16V 1
C207	CM2-2-3500-K00SV	Mylar	0.022μF 50V ±10%	1	C513	CD1-0-6160-0001V	Electrolytic 10μF 16V 1
C208	CM2-2-3500-K00SV	Mylar	0.022μF 50V ±10%	1	C514	CD1-0-6160-0001V	Electrolytic 10μF 16V 1
C209	CD1-0-6160-0001V	Electrolytic	10μF 16V	1	C515	CM5-6-2500-K00SV	Mylar 0.0056μF 50V ±10% 1
C210	CD1-0-6160-0001V	Electrolytic	10μF 16V	1	C516	CM5-6-2500-K00SV	Mylar 0.0056μF 50V ±10% 1
C211	CM1-5-3500-K00SV	Mylar	0.015μF 50V ±10%	1	C517	CM2-7-3500-K00SV	Mylar 0.027μF 50V ±10% 1
C212	CM1-5-3500-K00SV	Mylar	0.015μF 50V ±10%	1	C518	CM2-7-3500-K00SV	Mylar 0.027μF 50V ±10% 1
C213	CD1-0-7160-0001V	Electrolytic	100μF 16V	1	C519	CM4-7-2500-K00SV	Mylar 0.0047μF 50V ±10% 1
C214	CI2-2-3160-NG00R	Boundary	0.022μF 16V ±30%	1	C520	CM4-7-2500-K00SV	Mylar 0.0047μF 50V ±10% 1
C215	CC8-2-1500-KE01R	Ceramic	820pF 50V ±10%	1	C521	CM4-7-3500-J00TV	Mylar 0.047μF 50V ±5% 1
C216	CC8-2-1500-KE01R	Ceramic	820pF 50V ±10%	1	C522	CM4-7-3500-J00TV	Mylar 0.047μF 50V ±5% 1
C217	CD1-0-6160-0001V	Electrolytic	10μF 16V	1	C523	CD1-0-6160-0001V	Electrolytic 10μF 16V 1
C218	CD1-0-6160-0001V	Electrolytic	10μF 16V	1	C524	CD1-0-6160-0001V	Electrolytic 10μF 16V 1
C219	CD1-0-763A-0001V	Electrolytic	100μF 6.3V	1	C525	CM1-0-4500-J00TV	Mylar 0.1μF 50V ±5% 1
C220	CD1-0-763A-0001V	Electrolytic	100μF 6.3V	1	C526	CM1-0-4500-J00TV	Mylar 0.1μF 50V ±5% 1
C221	CM2-2-3500-K00SV	Mylar	0.022μF 50V ±10%	1	C527	CM3-3-4500-J00TV	Mylar 0.33μF 50V ±5% 1
C222	CM2-2-3500-K00SV	Mylar	0.022μF 50V ±10%	1	C528	CM3-3-4500-J00TV	Mylar 0.33μF 50V ±5% 1
C223	CD1-0-6160-0001V	Electrolytic	10μF 16V	1	C529	CD4-7-6160-0001V	Electrolytic 47μF 16V 1
C224	CD1-0-6160-0001V	Electrolytic	10μF 16V	1	C530	CD1-0-7160-0006V	Electrolytic 100μF 16V 1
C225	CM1-5-3500-K00SV	Mylar	0.015μF 50V ±10%	1	C531	CD1-0-5500-0001V	Electrolytic 1μF 50V 1
C226	CM1-5-3500-K00SV	Mylar	0.015μF 50V ±10%	1	C532	CD1-0-5500-0001V	Electrolytic 1μF 50V 1
C227	CD1-0-5500-0001V	Electrolytic	1μF 50V	1	C533	CD1-0-5500-0001V	Electrolytic 1μF 50V 1
C228	CD1-0-5500-0001V	Electrolytic	1μF 50V	1	C534	CD1-0-5500-0001V	Electrolytic 1μF 50V 1
C229	CD1-0-5500-0001V	Electrolytic	1μF 50V	1	C535	CD2-2-5500-0001V	Electrolytic 2.2μF 50V 1
C230	CD1-0-5500-0001V	Electrolytic	1μF 50V	1	C536	CD2-2-5500-0001V	Electrolytic 2.2μF 50V 1
C231	CD1-0-7160-0001V	Electrolytic	100μF 16V	1	C537	CD1-0-5500-0001V	Electrolytic 1μF 50V 1
C232	CD1-0-7160-0001V	Electrolytic	100μF 16V	1	C538	CD1-0-5500-0001V	Electrolytic 1μF 50V 1
C233	CD4-7-4500-0001V	Electrolytic	0.47μF 50V	1	C539	CD4-7-5250-0001V	Electrolytic 4.7μF 25V 1
C234	CD2-2-8160-0001V	Electrolytic	2200μF 16V	1	C540	CD4-7-5250-0001V	Electrolytic 4.7μF 25V 1
C235	CD3-3-4500-0001V	Electrolytic	0.33μF 50V	1	C541	CD1-0-6160-0001V	Electrolytic 10μF 16V 1
C236	CC4-7-1500-KE01R	Ceramic	470pF 50V ±10%	1	C542	CD1-0-6160-0001V	Electrolytic 10μF 16V 1
C237	CC4-7-1500-KE01R	Ceramic	470pF 50V ±10%	1	C543	CM2-2-3500-K00SV	Mylar 0.022μF 50V ±10% 1
C238	CC2-2-1500-KD00C	Ceramic	220pF 50V ±10%	1	C544	CM2-2-3500-K00SV	Mylar 0.022μF 50V ±10% 1
C239	CC2-2-1500-KD00C	Ceramic	220pF 50V ±10%	1	C545	CD4-7-5250-0001V	Electrolytic 4.7μF 25V 1
C240	CC1-0-3500-KE00C	Ceramic	0.01μF 50V ±10%	1	C546	CD4-7-5250-0001V	Electrolytic 4.7μF 25V 1
C401	CD2-2-6250-0001V	Electrolytic	22μF 25V	1	C547	CD4-7-6100-0001V	Electrolytic 47μF 10V 1
C402	CD1-0-4500-0001V	Electrolytic	0.1μF 50V	1	C548	CD4-7-6100-0001V	Electrolytic 47μF 10V 1
C403	CD1-0-4500-0001V	Electrolytic	0.1μF 50V	1	C549	CD2-2-6100-0001V	Electrolytic 22μF 10V 1
C404	CD1-0-4500-0001V	Electrolytic	0.1μF 50V	1	C550	CD2-2-6100-0001V	Electrolytic 22μF 10V 1
C405	CD1-0-5500-0001V	Electrolytic	1μF 50V	1	C551	CM2-7-2500-K00SV	Mylar 0.0027μF 50V ±10% 1
C406	CD1-0-5500-0001V	Electrolytic	1μF 50V	1	C552	CM2-7-2500-K00SV	Mylar 0.0027μF 50V ±10% 1
C407	CD1-0-6250-0001V	Electrolytic	10μF 25V	1	C553	CM3-9-2500-K00SV	Mylar 0.0039μF 50V ±10% 1
C408	CD2-2-6250-0001V	Electrolytic	22μF 25V	1	C554	CM3-9-2500-K00SV	Mylar 0.0039μF 50V ±10% 1
C409	CD4-7-5500-0001V	Electrolytic	4.7μF 50V	1	C555	CM2-2-2500-K00SV	Mylar 0.0022μF 50V ±10% 1
C410	CD4-7-5500-0001V	Electrolytic	4.7μF 50V	1	C556	CM2-2-2500-K00SV	Mylar 0.0022μF 50V ±10% 1
C411	CD2-2-6250-0001V	Electrolytic	22μF 25V	1	C557	CM2-7-2500-K00SV	Mylar 0.0027μF 50V ±10% 1
C412	CD2-2-6250-0001V	Electrolytic	22μF 25V	1	C558	CM2-7-2500-K00SV	Mylar 0.0027μF 50V ±10% 1

P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty	Ref. No.	Part No.	Description	Q'ty
C559	CM2-7-2500-K00SV	Mylar 0.0027μF 50V ±10%	1	C654	CC1-0-3501-YEY0C	Ceramic 0.01μF 500V +100,-0%	1
C560	CM2-7-2500-K00SV	Mylar 0.0027μF 50V ±10%	1	C655	CC2-2-1500-KD00C	Ceramic 220pF 50V ±10%	1
C561	CM2-7-2500-K00SV	Mylar 0.0027μF 50V ±10%	1	C656	CC2-2-1500-KD00C	Ceramic 220pF 50V ±10%	1
C562	CM2-7-2500-K00SV	Mylar 0.0027μF 50V ±10%	1	C657	CC2-2-2500-KE00C	Ceramic 2200pF 50V ±10%	1
C563	CD1-0-7160-0006V	Electrolytic 100μF 16V	1	C658	CC2-2-2500-KE00C	Ceramic 2200pF 50V ±10%	1
C564	CM8-2-3500-J00TV	Mylar 0.082μF 50V ±5%	1	C659	CC1-0-3500-KE00C	Ceramic 0.01μF 50V ±10%	1
C565	CM8-2-3500-J00TV	Mylar 0.082μF 50V ±5%	1	C660	CC1-0-3500-KE00C	Ceramic 0.01μF 50V ±10%	1
C566	CC1-0-1500-KE01R	Ceramic 100pF 50V ±10%	1	C661	CC1-0-1500-KE01R	Ceramic 100pF 50V ±10%	1
C567	CC1-0-1500-KE01R	Ceramic 100pF 50V ±10%	1	C662	CC1-0-1500-KE01R	Ceramic 100pF 50V ±10%	1
C568	CC1-0-1500-KE01R	Ceramic 100pF 50V ±10%	1	C663	CC8-2-1500-KE00C	Ceramic 820pF 50V ±10%	1
C569	CC1-0-1500-KE01R	Ceramic 100pF 50V ±10%	1	C664	CC8-2-1500-KE00C	Ceramic 820pF 50V ±10%	1
C601	CC8-2-1500-KE01R	Ceramic 820pF 50V ±10%	1	C665	CC1-8-2500-KE00C	Ceramic 0.0018μF 50V ±10%	1
C602	CC8-2-1500-KE01R	Ceramic 820pF 50V ±10%	1	C666	CC1-8-2500-KE00C	Ceramic 0.0018μF 50V ±10%	1
C603	CB3-3-5250-0000V	None-polar 3.3μF 25V	1	C667	CD2-2-763A-0006V	Electrolytic 220μF 6.3V	1
C604	CB3-3-5250-0000V	None-polar 3.3μF 25V	1	C668	CD2-2-763A-0006V	Electrolytic 220μF 6.3V	1
C605	CD3-3-6160-0001V	Electrolytic 33μF 16V	1	C669	CD1-0-5500-0002V	Electrolytic 1μF 50V	1
C606	CD3-3-6160-0001V	Electrolytic 33μF 16V	1	C670	CI4-7-3250-MF00C	Boundary 0.047μF 25V ±20%	1
C607	CD4-7-6350-0001V	Electrolytic 47μF 35V	1	SEMICONDUCTORS If necessary, replace both Diode D1 (SVC 321) and Diode D2 (SVC 321) together with new ones which have the equivalent characteristics.			
C608	CD4-7-6350-0001V	Electrolytic 47μF 35V	1				
C609	CD1-0-7350-0006V	Electrolytic 100μF 35V	1	D1	202-5-1260-32123	Diode, SVC 321	1
C610	CD1-0-6350-0001V	Electrolytic 10μF 35V	1	D2	202-5-1260-32123	Diode, SVC 321	1
C611	CD1-0-6350-0001V	Electrolytic 10μF 35V	1	D3	4-2029-74080	Diode, 1SS 201	1
C612	CD1-0-7350-0006V	Electrolytic 100μF 35V	1	D5	202-5-2810-44210	Diode, DS 442	1
C613	CM1-0-4500-J00TV	Mylar 0.1μF 50V ±5%	1	D6	202-5-1420-00128	Diode, GMA 01	1
C614	CM1-0-4500-J00TV	Mylar 0.1μF 50V ±5%	1	D201	4-2029-74080	Diode, 1SS 201	1
C615	CM1-0-4500-J00TV	Mylar 0.1μF 50V ±5%	1	D202	202-5-3200-03321	Zener Diode, GZA 3.3 Y	1
C616	CD4-7-6160-0001V	Electrolytic 47μF 16V	1	D203	202-5-1420-00128	Diode, GMA 01	1
C617	4-2239-71280	Electrolytic 1000μF 16V	1	D204	202-5-0220-01010	Diode, DSF 10 C	1
C618	4-2239-71280	Electrolytic 1000μF 16V	1	D207	202-5-1420-00128	Diode, GMA 01	1
C619	CD1-0-7160-0006V	Electrolytic 100μF 16V	1	D208	202-5-1420-00128	Diode, GMA 01	1
C620	CD1-0-6160-0001V	Electrolytic 10μF 16V	1	D209	202-5-1420-00128	Diode, GMA 01	1
C621	CD1-0-7160-0006V	Electrolytic 100μF 16V	1	D210	202-5-2810-44210	Diode, DS 442	1
C622	CD1-0-7160-0006V	Electrolytic 100μF 16V	1	D211	202-5-2810-44210	Diode, DS 442	1
C623	CD4-7-7250-0006V	Electrolytic 470μF 25V	1	D212	202-5-1420-00128	Diode, GMA 01	1
C624	CD4-7-7250-0006V	Electrolytic 470μF 25V	1	D213	202-5-3160-00110	Diode, GMA 01	1
C625	4-2239-72090	Electrolytic 100μF 25V	1	D214	202-5-3160-00110	Diode, GMA 01	1
C626	4-2239-72090	Electrolytic 100μF 25V	1	D215	202-5-3160-00110	Diode, GMA 01	1
C627	CD4-7-8350-0005V	Electrolytic 4700μF 35V	1	D401	202-5-1420-00128	Diode, GMA 01	1
C628	CD4-7-8350-0005V	Electrolytic 4700μF 35V	1	D402	202-5-1420-00128	Diode, GMA 01	1
C629	CD4-7-6350-0001V	Electrolytic 47μF 35V	1	D403	4-2029-74080	Diode, 1SS 201	1
C630	CC1-0-3501-YEY0C	Ceramic 0.01μF 500V +100,-0%	1	D404	202-5-1420-00128	Diode, GMA 01	1
C631	CD4-7-6350-0001V	Electrolytic 47μF 35V	1	D405	202-5-1420-00128	Diode, GMA 01	1
C632	CC1-0-3501-YEY0C	Ceramic 0.01μF 500V +100,-0%	1	D406	202-5-1420-00128	Diode, GMA 01	1
C633	CC1-0-3501-YEY0C	Ceramic 0.01μF 500V +100,-0%	1	D407	202-5-2810-44210	Diode, DS 442	1
C634	CC1-0-3501-YEY0C	Ceramic 0.01μF 500V +100,-0%	1	D408	202-5-1420-00128	Diode, GMA 01	1
C635	CC1-0-3501-YEY0C	Ceramic 0.01μF 500V +100,-0%	1	D409	202-5-1420-00128	Diode, GMA 01	1
C636	CD4-7-7160-0006V	Electrolytic 470μF 16V	1	D410	202-5-1420-00128	Diode, GMA 01	1
C637	CD4-7-7160-0006V	Electrolytic 470μF 16V	1	D411	202-5-1420-00128	Diode, GMA 01	1
C638	CD1-0-7160-0001V	Electrolytic 100μF 16V	1	D412	202-5-1420-00128	Diode, GMA 01	1
C639	CD1-0-7160-0001V	Electrolytic 100μF 16V	1	D413	202-5-1420-00128	Diode, GMA 01	1
C640	CD1-0-8250-0006V	Electrolytic 1000μF 25V	1	D414	202-5-1420-00128	Diode, GMA 01	1
C641	CD1-0-8250-0006V	Electrolytic 1000μF 25V	1	D415	202-5-1420-00128	Diode, GMA 01	1
C642	CC1-0-3500-ZG00C	Ceramic 0.01μF 50V +80,-20%	1	D416	202-5-1420-00128	Diode, GMA 01	1
C643	CC1-0-3500-ZG00C	Ceramic 0.01μF 50V +80,-20%	1	D417	202-5-1420-00128	Diode, GMA 01	1
C644	CC1-0-3500-ZG00C	Ceramic 0.01μF 50V +80,-20%	1	D418	202-5-1420-00128	Diode, GMA 01	1
C645	CC1-0-3500-ZG00C	Ceramic 0.01μF 50V +80,-20%	1	D419	202-5-1420-00128	Diode, GMA 01	1
C646	CC1-0-3500-ZG00C	Ceramic 0.01μF 50V +80,-20%	1	D420	4-2029-73520	Zener Diode, MTZ 4.7 B	1
C647	CC1-0-3500-ZG00C	Ceramic 0.01μF 50V +80,-20%	1	D421	202-5-1420-00128	Diode, GMA 01	1
C648	CC1-0-3500-ZG00C	Ceramic 0.01μF 50V +80,-20%	1	D422	202-5-1420-00128	Diode, GMA 01	1
C649	CC1-0-3500-ZG00C	Ceramic 0.01μF 50V +80,-20%	1	D423	202-5-1420-00128	Diode, GMA 01	1
C650	CC1-0-3500-ZG00C	Ceramic 0.01μF 50V +80,-20%	1				
C651	CD4-7-6160-0001V	Electrolytic 47μF 16V	1				
C652	CD1-0-8250-0006V	Electrolytic 1000μF 25V	1				
C653	CD1-0-8250-0006V	Electrolytic 1000μF 25V	1				

P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty	Ref. No.	Part No.	Description	Q'ty
D424	202-5-1420-00128	Diode, GMA 01	1	Q205	203-5-4921-01270	Transistor, 2SD 1012	1
D425	202-5-1420-00128	Diode, GMA 01	1	Q206	203-5-4921-01270	Transistor, 2SD 1012	1
D426	202-5-1420-00128	Diode, GMA 01	1	Q207	203-5-5000-53650	Transistor, 2SC 536	1
D427	4-2029-72420	Zener Diode, MTZ 5.6 B	1	Q208	203-5-5000-53650	Transistor, 2SC 536	1
D428	202-5-3200-03321	Zener Diode, GZA 3.3 Y	1	Q209	203-5-5000-53650	Transistor, 2SC 536	1
D429	202-5-1420-00128	Diode, GMA 01	1	Q210	203-5-5000-53650	Transistor, 2SC 536	1
D430	4-2029-73510	Diode, 1SS 200	1	Q401	203-5-6840-56050	Transistor, 2SB 560	1
D431	202-5-3160-00110	Diode, GMA 01	1	Q402	203-5-5000-53650	Transistor, 2SC 536	1
D501	202-5-1420-00128	Diode, GMA 01	1	Q403	203-5-6840-56050	Transistor, 2SB 560	1
D502	202-5-1420-00128	Diode, GMA 01	1	Q404	203-5-5000-53650	Transistor, 2SC 536	1
D503	202-5-1420-00128	Diode, GMA 01	1	Q405	203-5-5000-53650	Transistor, 2SC 536	1
D504	202-5-1420-00128	Diode, GMA 01	1	Q406	203-5-5000-53650	Transistor, 2SC 536	1
D505	202-5-1420-00128	Diode, GMA 01	1	Q407	203-5-5000-53650	Transistor, 2SC 536	1
D506	202-5-1420-00128	Diode, GMA 01	1	Q408	203-5-5000-53650	Transistor, 2SC 536	1
D507	202-5-1420-00128	Diode, GMA 01	1	Q409	203-5-5000-53650	Transistor, 2SC 536	1
D508	202-5-1420-00128	Diode, GMA 01	1	Q410	203-5-7200-60850	Transistor, 2SA 608	1
D601	202-5-3210-07513	Zener Diode, GZA 7.5 Z	1	Q411	203-5-7200-60850	Transistor, 2SA 608	1
D602	202-5-3060-11020	Zener Diode, GZB 11 B	1	Q412	203-5-5000-53650	Transistor, 2SC 536	1
D603	202-5-3210-11013	Zener Diode, GZA 11 Z	1	Q413	203-5-5000-53650	Transistor, 2SC 536	1
D604	202-5-3210-18012	Zener Diode, GZA 18 Y	1	Q414	203-5-7200-60850	Transistor, 2SA 608	1
D605	202-5-3210-18012	Zener Diode, GZA 18 Y	1	Q415	203-5-7200-60850	Transistor, 2SA 608	1
D606	202-5-3210-12012	Zener Diode, GZA 12 Y	1	Q416	203-5-4921-01270	Transistor, 2SD 1012	1
D607	202-5-3210-13012	Zener Diode, GZA 13 Y	1	Q501	203-5-4921-01270	Transistor, 2SD 1012	1
D608	202-5-1420-00128	Diode, GMA 01	1	Q502	203-5-4921-01270	Transistor, 2SD 1012	1
D609	202-5-2500-13541	Diode, DS 135	1	Q503	4-2039-72310	Transistor, DTC-114	1
D610	202-5-2620-03010	Bridge Diode, BA 30 C	1	Q504	4-2039-72310	Transistor, DTC-114	1
D611	202-5-2500-13541	Diode, DS 135	1	Q505	4-2039-72310	Transistor, DTC-114	1
D612	202-5-2500-13541	Diode, DS 135	1	Q506	203-5-5000-53650	Transistor, 2SC 536	1
D613	202-5-2500-13541	Diode, DS 135	1	Q507	203-5-5000-53650	Transistor, 2SC 536	1
D614	202-5-2500-13541	Diode, DS 135	1	Q508	203-5-5000-53650	Transistor, 2SC 536	1
D615	202-5-2500-13541	Diode, DS 135	1	Q509	203-5-5000-53650	Transistor, 2SC 536	1
D616	202-5-2500-13541	Diode, DS 135	1	Q510	203-5-5000-53650	Transistor, 2SC 536	1
D617	202-5-2500-13541	Diode, DS 135	1	Q511	203-5-5000-53650	Transistor, 2SC 536	1
D618	202-5-2500-13541	Diode, DS 135	1	Q512	203-5-5000-53660	Transistor, 2SC 536	1
D619	DGG---W02----	Diode, W02	1	Q513	203-5-5000-53660	Transistor, 2SC 536	1
IC1	207-5-3811-26510	IC, LA 1265	1	Q514	203-5-5000-53670	Transistor, 2SC 536	1
IC2	206-5-1613-39010	IC, LA 3390	1	Q515	203-5-5000-53670	Transistor, 2SC 536	1
IC3	206-5-0793-16010	IC, LA 3160	1	Q516	203-5-5000-53650	Transistor, 2SC 536	1
IC4	206-5-0793-16010	IC, LA 3160	1	Q517	203-5-5000-53650	Transistor, 2SC 536	1
IC5	206-5-8897-81520	IC, LC 7815H	1	Q601	203-5-4921-01270	Transistor, 2SD 1012	1
IC6	4-2069-74720	IC, TA 7403P	1	Q602	203-5-4921-01270	Transistor, 2SD 1012	1
IC7	4-2069-74720	IC, TA 7403P	1	Q603	TTT---2SC1-627AY	Transistor, 2SC 1627	1
IC8	4-2069-73760	IC, TD 62504P	1	Q604	4-2039-71542	Transistor, 2SD 1406	1
IC9	4-2069-73760	IC, TD 62504P	1	Q605	4-2039-71582	Transistor, 2SB 1016	1
IC10	206-5-1284-13110	IC, STK 4131 Mark 2	1	Q606	4-2039-71542	Transistor, 2SD 1406	1
IC11	207-5-6474-91310	IC, LC 4913B	1	Q607	4-2039-71542	Transistor, 2SD 1406	1
IC12	4-2069-70312	IC, TC 4011BP	1				
IC13	4-2069-70312	IC, TC 4011BP	1				
Q1	4-2039-71410	FET, 2SK 246	1	R1	RD1-0-5161-JH000	Carbon 1MΩ 1/6W ±5%	1
Q2	203-5-5500-93060	Transistor, 2SC 930	1	R2	RD5-6-1161-JH000	Carbon 560Ω 1/6W ±5%	1
Q3	4-2039-72320	Transistor, DTC-124	1	R3	RD2-7-2161-JH000	Carbon 2.7kΩ 1/6W ±5%	1
Q4	4-2039-72320	Transistor, DTC-124	1	R4	RD1-0-5251-JM000	Carbon 1MΩ 1/4W ±5%	1
Q5	203-5-5000-53650	Transistor, 2SC 536	1	R5	RD1-0-4161-JH000	Carbon 100kΩ 1/6W ±5%	1
Q6	203-5-5000-53650	Transistor, 2SC 536	1	R6	RD5-6-2161-JH000	Carbon 5.6kΩ 1/6W ±5%	1
Q7	203-5-5000-53670	Transistor, 2SC 536	1	R7	RD2-2-1161-JH000	Carbon 220Ω 1/6W ±5%	1
Q8	203-5-5000-53650	Transistor, 2SC 536	1	R8	RD4-7-0251-JM000	Carbon 47Ω 1/4W ±5%	1
Q9	203-5-4921-01270	Transistor, 2SD 1012	1	R9	RD5-6-2161-JH000	Carbon 5.6kΩ 1/6W ±5%	1
Q10	203-5-5000-53660	Transistor, 2SC 536	1	R10	RD3-3-2161-JH000	Carbon 3.3kΩ 1/6W ±5%	1
Q11	203-5-5000-53660	Transistor, 2SC 536	1	R11	RD3-9-1161-JH000	Carbon 390Ω 1/6W ±5%	1
Q12	203-5-5000-53660	Transistor, 2SC 536	1	R12	RD3-3-1161-JH000	Carbon 330Ω 1/6W ±5%	1
Q201	203-5-4921-01270	Transistor, 2SD 1012	1	R13	RD6-8-0161-JH000	Carbon 68Ω 1/6W ±5%	1
Q202	203-5-4921-01270	Transistor, 2SD 1012	1	R14	RD1-0-1161-JH000	Carbon 100Ω 1/6W ±5%	1
Q203	203-5-5000-53650	Transistor, 2SC 536	1	R15	RD1-0-3161-JH000	Carbon 10kΩ 1/6W ±5%	1
Q204	203-5-5000-53650	Transistor, 2SC 536	1	R16	RD3-9-3161-JH000	Carbon 39kΩ 1/6W ±5%	1

P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty	Ref. No.	Part No.	Description	Q'ty
R17	RD1-0-1161-JH000	Carbon	100Ω 1/6W ±5% 1	R208	RD1-8-4161-JH000	Carbon	180kΩ 1/6W ±5% 1
R18	RD1-0-3161-JH000	Carbon	10kΩ 1/6W ±5% 1	R209	RD2-2-3161-JH000	Carbon	22kΩ 1/6W ±5% 1
R19	RD1-0-3161-JH000	Carbon	10kΩ 1/6W ±5% 1	R210	RD2-2-3161-JH000	Carbon	22kΩ 1/6W ±5% 1
R20	RD6-8-2161-JH000	Carbon	6.8kΩ 1/6W ±5% 1	R211	RD1-0-3161-JH000	Carbon	10kΩ 1/6W ±5% 1
R22	RD1-0-3161-JH000	Carbon	10kΩ 1/6W ±5% 1	R212	RD1-0-3161-JH000	Carbon	10kΩ 1/6W ±5% 1
R24	RD1-0-1251-JS000	Carbon	100Ω 1/4W ±5% 1	R213	RD3-3-2161-JH000	Carbon	3.3kΩ 1/6W ±5% 1
R25	RD1-0-2161-JH000	Carbon	1kΩ 1/6W ±5% 1	R214	RD3-3-2161-JH000	Carbon	3.3kΩ 1/6W ±5% 1
R26	RD2-2-4161-JH000	Carbon	220kΩ 1/6W ±5% 1	R215	RD2-2-3161-JH000	Carbon	22kΩ 1/6W ±5% 1
R27	RD1-0-3161-JH000	Carbon	10kΩ 1/6W ±5% 1	R216	RD2-2-3161-JH000	Carbon	22kΩ 1/6W ±5% 1
R28	RD1-0-3161-JH000	Carbon	10kΩ 1/6W ±5% 1	R217	RD3-9-2161-JH000	Carbon	3.9kΩ 1/6W ±5% 1
R29	RD4-7-3161-JH000	Carbon	47kΩ 1/6W ±5% 1	R218	RD3-9-2161-JH000	Carbon	3.9kΩ 1/6W ±5% 1
R30	RD4-7-3161-JH000	Carbon	47kΩ 1/6W ±5% 1	R219	RD1-0-5161-JH000	Carbon	1MΩ 1/6W ±5% 1
R31	RD1-0-0161-JH000	Carbon	10Ω 1/6W ±5% 1	R220	RD1-0-5161-JH000	Carbon	1MΩ 1/6W ±5% 1
R32	RD1-0-0161-JH000	Carbon	10Ω 1/6W ±5% 1	R221	RD1-0-3161-JH000	Carbon	10kΩ 1/6W ±5% 1
R33	RD2-2-2161-JH000	Carbon	2.2kΩ 1/6W ±5% 1	R222	RD1-0-3161-JH000	Carbon	10kΩ 1/6W ±5% 1
R34	RD2-2-2161-JH000	Carbon	2.2kΩ 1/6W ±5% 1	R223	RD1-0-2161-JH000	Carbon	1kΩ 1/6W ±5% 1
R35	RD1-0-2161-JH000	Carbon	1kΩ 1/6W ±5% 1	R224	RD1-0-2161-JH000	Carbon	1kΩ 1/6W ±5% 1
R36	RD1-0-2161-JH000	Carbon	1kΩ 1/6W ±5% 1	R225	RD3-3-0161-JH000	Carbon	33Ω 1/6W ±5% 1
R37	RD1-2-3161-JH000	Carbon	12kΩ 1/6W ±5% 1	R226	RD3-3-0161-JH000	Carbon	33Ω 1/6W ±5% 1
R38	RD2-2-4161-JH000	Carbon	220kΩ 1/6W ±5% 1	R227	RD5-6-2161-JH000	Carbon	5.6kΩ 1/6W ±5% 1
R39	RD1-8-3161-JH000	Carbon	18kΩ 1/6W ±5% 1	R228	RD5-6-2161-JH000	Carbon	5.6kΩ 1/6W ±5% 1
R40	RD1-8-3161-JH000	Carbon	18kΩ 1/6W ±5% 1	R229	RD1-8-4161-JH000	Carbon	180kΩ 1/6W ±5% 1
R41	RD3-3-2161-JH000	Carbon	3.3kΩ 1/6W ±5% 1	R230	RD1-8-4161-JH000	Carbon	180kΩ 1/6W ±5% 1
R42	RD3-3-2161-JH000	Carbon	3.3kΩ 1/6W ±5% 1	R231	RD2-2-3161-JH000	Carbon	22kΩ 1/6W ±5% 1
R43	RD1-0-3161-JH000	Carbon	10kΩ 1/6W ±5% 1	R232	RD2-2-3161-JH000	Carbon	22kΩ 1/6W ±5% 1
R44	RD1-0-3161-JH000	Carbon	10kΩ 1/6W ±5% 1	R233	RD3-3-2161-JH000	Carbon	3.3kΩ 1/6W ±5% 1
R45	RD1-0-3161-JH000	Carbon	10kΩ 1/6W ±5% 1	R234	RD3-3-2161-JH000	Carbon	3.3kΩ 1/6W ±5% 1
R46	RD1-0-3161-JH000	Carbon	10kΩ 1/6W ±5% 1	R235	RD2-2-3161-JH000	Carbon	22kΩ 1/6W ±5% 1
R47	RD1-0-2161-JH000	Carbon	1kΩ 1/6W ±5% 1	R236	RD2-2-3161-JH000	Carbon	22kΩ 1/6W ±5% 1
R48	RD1-0-2161-JH000	Carbon	1kΩ 1/6W ±5% 1	R237	RD3-9-2161-JH000	Carbon	3.9kΩ 1/6W ±5% 1
R49	RD3-9-1161-JH000	Carbon	390Ω 1/6W ±5% 1	R238	RD3-9-2161-JH000	Carbon	3.9kΩ 1/6W ±5% 1
R50	RD3-9-1161-JH000	Carbon	390Ω 1/6W ±5% 1	R239	RD1-0-5161-JH000	Carbon	1MΩ 1/6W ±5% 1
R51	RD1-0-4161-JH000	Carbon	100kΩ 1/6W ±5% 1	R240	RD1-0-5161-JH000	Carbon	1MΩ 1/6W ±5% 1
R52	RD1-0-4161-JH000	Carbon	100kΩ 1/6W ±5% 1	R241	RD2-2-3161-JH000	Carbon	22kΩ 1/6W ±5% 1
R53	RD1-0-1251-JS000	Carbon	100Ω 1/4W ±5% 1	R242	RD2-2-3161-JH000	Carbon	22kΩ 1/6W ±5% 1
R54	RD2-2-0251-JS000	Carbon	22Ω 1/4W ±5% 1	R243	RD1-0-3161-JH000	Carbon	10kΩ 1/6W ±5% 1
R55	RD1-0-3161-JH000	Carbon	10kΩ 1/6W ±5% 1	R244	RD1-0-3161-JH000	Carbon	10kΩ 1/6W ±5% 1
R56	RD4-7-2161-JH000	Carbon	4.7kΩ 1/6W ±5% 1	R245	RD6-8-1251-JM000	Carbon	680Ω 1/4W ±5% 1
R57	RD6-8-2161-JH000	Carbon	6.8kΩ 1/6W ±5% 1	R246	RD6-8-1251-JM000	Carbon	680Ω 1/4W ±5% 1
R61	RD4-7-3161-JH000	Carbon	47kΩ 1/6W ±5% 1	R247	RD5-6-4161-JH000	Carbon	560kΩ 1/6W ±5% 1
R62	RD1-0-4161-JH000	Carbon	100kΩ 1/6W ±5% 1	R248	RD5-6-4161-JH000	Carbon	560kΩ 1/6W ±5% 1
R63	RD2-2-3161-JH000	Carbon	22kΩ 1/6W ±5% 1	R249	RD1-0-4161-JH000	Carbon	100kΩ 1/6W ±5% 1
R64	RD1-0-4161-JH000	Carbon	100kΩ 1/6W ±5% 1	R250	RD1-0-4161-JH000	Carbon	100kΩ 1/6W ±5% 1
R65	RD1-0-4161-JH000	Carbon	100kΩ 1/6W ±5% 1	R251	RD4-7-2161-JH000	Carbon	4.7kΩ 1/6W ±5% 1
R67	RD3-3-2161-JH000	Carbon	3.3kΩ 1/6W ±5% 1	R252	RD4-7-2161-JH000	Carbon	4.7kΩ 1/6W ±5% 1
R68	RD2-2-3161-JH000	Carbon	22kΩ 1/6W ±5% 1	R253	RD1-2-2161-JH000	Carbon	1.2kΩ 1/6W ±5% 1
R69	RD1-0-4161-JH000	Carbon	100kΩ 1/6W ±5% 1	R254	RD1-2-2161-JH000	Carbon	1.2kΩ 1/6W ±5% 1
R70	RD2-2-3161-JH000	Carbon	22kΩ 1/6W ±5% 1	R255	RD1-0-4161-JH000	Carbon	100kΩ 1/6W ±5% 1
R71	RD1-0-4161-JH000	Carbon	100kΩ 1/6W ±5% 1	R256	RD1-0-4161-JH000	Carbon	100kΩ 1/6W ±5% 1
R72	RD2-2-3161-JH000	Carbon	22kΩ 1/6W ±5% 1	R257	RD2-2-2161-JH000	Carbon	2.2kΩ 1/6W ±5% 1
R73	RD1-0-4161-JH000	Carbon	100kΩ 1/6W ±5% 1	R258	RD2-2-2161-JH000	Carbon	2.2kΩ 1/6W ±5% 1
R74	RD2-2-3161-JH000	Carbon	22kΩ 1/6W ±5% 1	R259	RD2-2-3161-JH000	Carbon	22kΩ 1/6W ±5% 1
R75	RD1-0-4161-JH000	Carbon	100kΩ 1/6W ±5% 1	R260	RD2-2-3161-JH000	Carbon	22kΩ 1/6W ±5% 1
R76	RD1-0-0161-JH000	Carbon	10Ω 1/6W ±5% 1	R261	RD2-2-4161-JH000	Carbon	220kΩ 1/6W ±5% 1
R77	RD4-7-3251-JM000	Carbon	47kΩ 1/4W ±5% 1	R262	RD2-2-4161-JH000	Carbon	220kΩ 1/6W ±5% 1
R78	RD5-6-2161-JH000	Carbon	5.6kΩ 1/6W ±5% 1	R263	RD2-2-4161-JH000	Carbon	220kΩ 1/6W ±5% 1
R79	RD4-7-2161-JH000	Carbon	4.7kΩ 1/6W ±5% 1	R264	RD2-2-4161-JH000	Carbon	220kΩ 1/6W ±5% 1
R201	RD1-0-2161-JH000	Carbon	1kΩ 1/6W ±5% 1	R265	RD2-2-4161-JH000	Carbon	220kΩ 1/6W ±5% 1
R202	RD1-0-2161-JH000	Carbon	1kΩ 1/6W ±5% 1	R266	RD1-0-4161-JH000	Carbon	100kΩ 1/6W ±5% 1
R203	RD3-3-0161-JH000	Carbon	33Ω 1/6W ±5% 1	R267	RD8-2-4161-JH000	Carbon	820kΩ 1/6W ±5% 1
R204	RD3-3-0161-JH000	Carbon	33Ω 1/6W ±5% 1	R268	RD1-0-2251-JM000	Carbon	1kΩ 1/4W ±5% 1
R205	RD5-6-2161-JH000	Carbon	5.6kΩ 1/6W ±5% 1	R269	RD2-2-3161-JH000	Carbon	22kΩ 1/6W ±5% 1
R206	RD5-6-2161-JH000	Carbon	5.6kΩ 1/6W ±5% 1	R270	RD2-2-3161-JH000	Carbon	22kΩ 1/6W ±5% 1
R207	RD1-8-4161-JH000	Carbon	180kΩ 1/6W ±5% 1	R271	RD1-0-4161-JH000	Carbon	100kΩ 1/6W ±5% 1

P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty	Ref. No.	Part No.	Description	Q'ty
R272	RD4-7-2161-JH000	Carbon 4.7kΩ 1/6W ±5%	1	R516	RD3-3-2161-JH000	Carbon 3.3kΩ 1/6W ±5%	1
R273	RD4-7-2161-JH000	Carbon 4.7kΩ 1/6W ±5%	1	R517	RD4-7-3161-JH000	Carbon 47kΩ 1/6W ±5%	1
R401	RD1-5-3161-JH000	Carbon 15kΩ 1/6W ±5%	1	R518	RD4-7-3161-JH000	Carbon 47kΩ 1/6W ±5%	1
R402	RD1-0-2161-JH000	Carbon 1kΩ 1/6W ±5%	1	R519	RD2-7-4161-JH000	Carbon 270kΩ 1/6W ±5%	1
R403	RD1-5-3161-JH000	Carbon 15kΩ 1/6W ±5%	1	R520	RD2-7-4161-JH000	Carbon 270kΩ 1/6W ±5%	1
R404	RD1-0-2161-JH000	Carbon 1kΩ 1/6W ±5%	1	R521	RD1-0-3161-JH000	Carbon 10kΩ 1/6W ±5%	1
R405	RD2-2-3161-JH000	Carbon 22kΩ 1/6W ±5%	1	R522	RD1-0-3251-JM000	Carbon 10kΩ 1/4W ±5%	1
R406	RD2-2-3161-JH000	Carbon 22kΩ 1/6W ±5%	1	R523	RD1-0-3161-JH000	Carbon 10kΩ 1/6W ±5%	1
R407	RD2-2-3161-JH000	Carbon 22kΩ 1/6W ±5%	1	R524	RD1-0-3161-JH000	Carbon 10kΩ 1/6W ±5%	1
R408	RD2-2-4161-JH000	Carbon 220kΩ 1/6W ±5%	1	R525	RD6-8-4161-JH000	Carbon 680kΩ 1/6W ±5%	1
R409	RD1-0-4161-JH000	Carbon 100kΩ 1/6W ±5%	1	R526	RD6-8-4161-JH000	Carbon 680kΩ 1/6W ±5%	1
R410	RD2-2-2161-JH000	Carbon 2.2kΩ 1/6W ±5%	1	R527	RD2-2-4161-JH000	Carbon 220kΩ 1/6W ±5%	1
R411	RD1-0-3161-JH000	Carbon 10kΩ 1/6W ±5%	1	R528	RD2-2-4161-JH000	Carbon 220kΩ 1/6W ±5%	1
R412	RD1-2-4161-JH000	Carbon 120kΩ 1/6W ±5%	1	R529	RD3-3-2161-JH000	Carbon 3.3kΩ 1/6W ±5%	1
R413	RD2-2-3161-JH000	Carbon 22kΩ 1/6W ±5%	1	R530	RD3-3-2161-JH000	Carbon 3.3kΩ 1/6W ±5%	1
R414	RD2-2-4161-JH000	Carbon 220kΩ 1/6W ±5%	1	R531	RD5-6-1161-JH000	Carbon 560Ω 1/6W ±5%	1
R415	RD1-2-4161-JH000	Carbon 120kΩ 1/6W ±5%	1	R532	RD5-6-1161-JH000	Carbon 560Ω 1/6W ±5%	1
R416	RD1-2-4161-JH000	Carbon 120kΩ 1/6W ±5%	1	R533	RD1-0-3161-JH000	Carbon 10kΩ 1/6W ±5%	1
R417	RD2-2-3161-JH000	Carbon 22kΩ 1/6W ±5%	1	R534	RD1-0-3161-JH000	Carbon 10kΩ 1/6W ±5%	1
R418	RD1-2-4161-JH000	Carbon 120kΩ 1/6W ±5%	1	R535	RD1-0-0161-JH000	Carbon 10Ω 1/6W ±5%	1
R419	RD2-7-3161-JH000	Carbon 27kΩ 1/6W ±5%	1	R536	RD1-0-0161-JH000	Carbon 10Ω 1/6W ±5%	1
R420	RD2-2-3161-JH000	Carbon 22kΩ 1/6W ±5%	1	R537	RD3-3-5161-JH000	Carbon 3.3MΩ 1/6W ±5%	1
R421	RD4-7-3161-JH000	Carbon 47kΩ 1/6W ±5%	1	R538	RD3-3-5161-JH000	Carbon 3.3MΩ 1/6W ±5%	1
R422	RD4-7-3161-JH000	Carbon 47kΩ 1/6W ±5%	1	R539	RD1-0-3161-JH000	Carbon 10kΩ 1/6W ±5%	1
R423	RD1-2-4161-JH000	Carbon 120kΩ 1/6W ±5%	1	R540	RD1-0-3161-JH000	Carbon 10kΩ 1/6W ±5%	1
R424	RD4-7-3161-JH000	Carbon 47kΩ 1/6W ±5%	1	R541	RD1-0-1161-JH000	Carbon 100Ω 1/6W ±5%	1
R425	RD1-2-4161-JH000	Carbon 120kΩ 1/6W ±5%	1	R542	RD1-0-1161-JH000	Carbon 100Ω 1/6W ±5%	1
R426	RD1-2-4161-JH000	Carbon 120kΩ 1/6W ±5%	1	R543	RD8-2-2161-JH000	Carbon 8.2kΩ 1/6W ±5%	1
R427	RD1-2-4161-JH000	Carbon 120kΩ 1/6W ±5%	1	R544	RD8-2-2161-JH000	Carbon 8.2kΩ 1/6W ±5%	1
R428	RD1-0-4161-JH000	Carbon 100kΩ 1/6W ±5%	1	R545	RD1-0-2161-JH000	Carbon 1kΩ 1/6W ±5%	1
R429	RD1-0-4161-JH000	Carbon 100kΩ 1/6W ±5%	1	R546	RD1-0-2161-JH000	Carbon 1kΩ 1/6W ±5%	1
R430	RD2-2-3161-JH000	Carbon 22kΩ 1/6W ±5%	1	R547	RD2-2-4161-JH000	Carbon 220kΩ 1/6W ±5%	1
R431	RD4-7-2161-JH000	Carbon 4.7kΩ 1/6W ±5%	1	R548	RD2-2-4161-JH000	Carbon 220kΩ 1/6W ±5%	1
R432	RD1-5-3161-JH000	Carbon 15kΩ 1/6W ±5%	1	R549	RD1-8-4161-JH000	Carbon 180kΩ 1/6W ±5%	1
R433	RD4-7-2161-JH000	Carbon 4.7kΩ 1/6W ±5%	1	R550	RD1-8-4161-JH000	Carbon 180kΩ 1/6W ±5%	1
R434	RD1-5-3161-JH000	Carbon 15kΩ 1/6W ±5%	1	R551	RD8-2-3161-JH000	Carbon 82kΩ 1/6W ±5%	1
R435	RD2-2-3161-JH000	Carbon 22kΩ 1/6W ±5%	1	R552	RD8-2-3161-JH000	Carbon 82kΩ 1/6W ±5%	1
R436	RD2-2-3161-JH000	Carbon 22kΩ 1/6W ±5%	1	R553	RD5-6-2161-JH000	Carbon 5.6kΩ 1/6W ±5%	1
R437	RD4-7-2161-JH000	Carbon 4.7kΩ 1/6W ±5%	1	R554	RD5-6-2161-JH000	Carbon 5.6kΩ 1/6W ±5%	1
R438	RD2-2-3161-JH000	Carbon 22kΩ 1/6W ±5%	1	R555	RD4-7-2161-JH000	Carbon 4.7kΩ 1/6W ±5%	1
R439	RD1-5-3161-JH000	Carbon 15kΩ 1/6W ±5%	1	R556	RD4-7-2161-JH000	Carbon 4.7kΩ 1/6W ±5%	1
R440	RD4-7-2161-JH000	Carbon 4.7kΩ 1/6W ±5%	1	R557	RD2-2-4161-JH000	Carbon 220kΩ 1/6W ±5%	1
R441	RD4-7-2161-JH000	Carbon 4.7kΩ 1/6W ±5%	1	R558	RD2-2-4161-JH000	Carbon 220kΩ 1/6W ±5%	1
R442	RD1-5-3161-JH000	Carbon 15kΩ 1/6W ±5%	1	R559	RD5-6-3251-JM000	Carbon 56kΩ 1/4W ±5%	1
R443	RD5-6-3161-JH000	Carbon 56kΩ 1/6W ±5%	1	R560	RD5-6-3251-JM000	Carbon 56kΩ 1/4W ±5%	1
R444	RD4-7-3161-JH000	Carbon 47kΩ 1/6W ±5%	1	R561	RD3-3-3161-JH000	Carbon 33kΩ 1/6W ±5%	1
R445	RD4-7-3161-JH000	Carbon 47kΩ 1/6W ±5%	1	R562	RD3-3-3161-JH000	Carbon 33kΩ 1/6W ±5%	1
R446	RD2-2-3161-JH000	Carbon 22kΩ 1/6W ±5%	1	R563	RD3-3-2161-JH000	Carbon 3.3kΩ 1/6W ±5%	1
R447	RD2-2-3161-JH000	Carbon 22kΩ 1/6W ±5%	1	R564	RD3-3-2161-JH000	Carbon 3.3kΩ 1/6W ±5%	1
R501	RD2-2-3161-JH000	Carbon 22kΩ 1/6W ±5%	1	R565	RD2-2-2161-JH000	Carbon 2.2kΩ 1/6W ±5%	1
R502	RD2-2-3161-JH000	Carbon 22kΩ 1/6W ±5%	1	R566	RD2-2-2161-JH000	Carbon 2.2kΩ 1/6W ±5%	1
R503	RD1-0-2161-JH000	Carbon 1kΩ 1/6W ±5%	1	R567	RD4-7-2161-JH000	Carbon 4.7kΩ 1/6W ±5%	1
R504	RD1-0-2161-JH000	Carbon 1kΩ 1/6W ±5%	1	R568	RD4-7-2161-JH000	Carbon 4.7kΩ 1/6W ±5%	1
R505	RD1-0-4161-JH000	Carbon 100kΩ 1/6W ±5%	1	R569	RD3-3-4161-JH000	Carbon 330kΩ 1/6W ±5%	1
R506	RD1-0-4161-JH000	Carbon 100kΩ 1/6W ±5%	1	R570	RD3-3-4161-JH000	Carbon 330kΩ 1/6W ±5%	1
R507	RD2-2-1251-JM000	Carbon 220Ω 1/4W ±5%	1	R571	RD4-7-3161-JH000	Carbon 47kΩ 1/6W ±5%	1
R508	RD2-2-1251-JM000	Carbon 220Ω 1/4W ±5%	1	R572	RD4-7-3161-JH000	Carbon 47kΩ 1/6W ±5%	1
R509	RD1-0-4161-JH000	Carbon 100kΩ 1/6W ±5%	1	R573	RD4-7-1161-JH000	Carbon 470Ω 1/6W ±5%	1
R510	RD1-0-4161-JH000	Carbon 100kΩ 1/6W ±5%	1	R574	RD4-7-1161-JH000	Carbon 470Ω 1/6W ±5%	1
R511	RD4-7-3161-JH000	Carbon 47kΩ 1/6W ±5%	1	R575	RD1-2-3161-JH000	Carbon 12kΩ 1/6W ±5%	1
R512	RD4-7-3161-JH000	Carbon 47kΩ 1/6W ±5%	1	R576	RD1-2-3161-JH000	Carbon 12kΩ 1/6W ±5%	1
R513	RD1-8-1161-JH000	Carbon 180Ω 1/6W ±5%	1	R577	RD2-2-3161-JH000	Carbon 22kΩ 1/6W ±5%	1
R514	RD1-8-1161-JH000	Carbon 180Ω 1/6W ±5%	1	R578	RD2-2-3161-JH000	Carbon 22kΩ 1/6W ±5%	1
R515	RD3-3-2161-JH000	Carbon 3.3kΩ 1/6W ±5%	1	R579	RD3-9-1161-JH000	Carbon 390Ω 1/6W ±5%	1

P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty	Ref. No.	Part No.	Description	Q'ty
R580	RD3-9-1161-JH000	Carbon	390Ω 1/6W ±5% 1	R901	RD1-5-4161-JH000	Carbon	150kΩ 1/6W ±5% 1
R581	RD4-7-1161-JH000	Carbon	470Ω 1/6W ±5% 1	R902	RD1-5-4161-JH000	Carbon	150kΩ 1/6W ±5% 1
R582	RD4-7-1161-JH000	Carbon	470Ω 1/6W ±5% 1	R903	RD5-6-3161-JH000	Carbon	56kΩ 1/6W ±5% 1
R583	RD2-7-3161-JH000	Carbon	27kΩ 1/6W ±5% 1	R904	RH3-9-1202-JZ003	Metal	390Ω 2W ±5% 1
R584	RD2-7-3161-JH000	Carbon	27kΩ 1/6W ±5% 1	R905	RD2-2-4161-JH000	Carbon	220kΩ 1/6W ±5% 1
R585	RD6-8-3161-JH000	Carbon	68kΩ 1/6W ±5% 1	R906	RD2-2-4161-JH000	Carbon	220kΩ 1/6W ±5% 1
R586	RD6-8-3161-JH000	Carbon	68kΩ 1/6W ±5% 1	R907	RD1-0-5161-JH000	Carbon	1MΩ 1/6W ±5% 1
R587	RD2-2-3161-JH000	Carbon	22kΩ 1/6W ±5% 1	R908	RD1-0-5161-JH000	Carbon	1MΩ 1/6W ±5% 1
R588	RD2-2-3161-JH000	Carbon	22kΩ 1/6W ±5% 1				
R589	RD1-0-3161-JH000	Carbon	10kΩ 1/6W ±5% 1				
R590	RD1-0-3161-JH000	Carbon	10kΩ 1/6W ±5% 1				
R591	RD1-2-1161-JH000	Carbon	120Ω 1/6W ±5% 1				
R592	RD1-2-1161-JH000	Carbon	120Ω 1/6W ±5% 1				
R593	RD2-7-2161-JH000	Carbon	2.7kΩ 1/6W ±5% 1				
R594	RD2-7-2161-JH000	Carbon	2.7kΩ 1/6W ±5% 1				
R595	RD6-8-2161-JH000	Carbon	6.8kΩ 1/6W ±5% 1				
R596	RD6-8-2161-JH000	Carbon	6.8kΩ 1/6W ±5% 1				
R597	RD1-0-2251-JM000	Carbon	1kΩ 1/4W ±5% 1				
R598	RD1-0-2251-JM000	Carbon	1kΩ 1/4W ±5% 1				
R599	RD2-2-4161-JH000	Carbon	220kΩ 1/6W ±5% 1				
R601	RD2-2-2161-JH000	Carbon	2.2kΩ 1/6W ±5% 1				
R602	RD2-2-2161-JH000	Carbon	2.2kΩ 1/6W ±5% 1				
R603	RD5-6-3161-JH000	Carbon	56kΩ 1/6W ±5% 1				
R604	RD5-6-3161-JH000	Carbon	56kΩ 1/6W ±5% 1				
R605	RD5-6-1161-JH000	Carbon	560Ω 1/6W ±5% 1				
R606	RD5-6-1161-JH000	Carbon	560Ω 1/6W ±5% 1				
R607	RD5-6-3161-JH000	Carbon	56kΩ 1/6W ±5% 1				
R608	RD5-6-3161-JH000	Carbon	56kΩ 1/6W ±5% 1				
R609	RD2-2-2251-JS000	Carbon	2.2kΩ 1/4W ±5% 1				
R610	RD2-2-2251-JS000	Carbon	2.2kΩ 1/4W ±5% 1				
R611	RD2-2-2251-JS000	Carbon	2.2kΩ 1/4W ±5% 1				
R612	RD2-2-2251-JS000	Carbon	2.2kΩ 1/4W ±5% 1				
R613	RF1-0-1501-JZ000	Fuse	100Ω 1/2W ±5% 1				
R614	RD1-0-2251-JS000	Carbon	1kΩ 1/4W ±5% 1				
R615	RH1-0-0202-JZ003	Metal	10Ω 2W ±5% 1				
R616	RH1-0-0202-JZ003	Metal	10Ω 2W ±5% 1				
R617	RD1-0-2251-JS000	Carbon	1kΩ 1/4W ±5% 1				
R618	RF1-0-1501-JZ000	Fuse	100Ω 1/2W ±5% 1				
R619	RD4-7-1251-JM000	Carbon	470Ω 1/4W ±5% 1				
R620	RD3-3-1251-JS000	Carbon	330Ω 1/4W ±5% 1				
R621	RD3-3-1251-JS000	Carbon	330Ω 1/4W ±5% 1				
R622	RH6-8-0202-JH003	Metal	68Ω 2W ±5% 1				
R623	RH2-2-1202-JZ003	Metal	220Ω 2W ±5% 1				
R624	RD1-5-2251-JM000	Carbon	1.5kΩ 1/4W ±5% 1				
R625	RD1-5-2251-JM000	Carbon	1.5kΩ 1/4W ±5% 1				
R626	RD5-6-A251-JS000	Carbon	5.6Ω 1/4W ±5% 1				
R627	RD5-6-A251-JS000	Carbon	5.6Ω 1/4W ±5% 1				
R628	RD3-3-1251-JS000	Carbon	330Ω 1/4W ±5% 1				
R629	RD3-3-1251-JS000	Carbon	330Ω 1/4W ±5% 1				
R630	RH3-3-0202-JH003	Metal	33Ω 2W ±5% 1				
R631	RH4-7-0202-JZ003	Metal	47Ω 2W ±5% 1				
R632	RD5-6-A251-JS000	Carbon	5.6Ω 1/4W ±5% 1				
R633	RD5-6-A251-JS000	Carbon	5.6Ω 1/4W ±5% 1				
R634	RD6-8-1251-JS000	Carbon	680Ω 1/4W ±5% 1				
R635	RD6-8-1251-JS000	Carbon	680Ω 1/4W ±5% 1				
R636	RF4-7-A501-JZ000	Fuse	4.7Ω 1/2W ±5% 1				
R637	RF4-7-A501-JZ000	Fuse	4.7Ω 1/2W ±5% 1				
R638	RD3-9-4251-JM000	Carbon	390kΩ 1/4W ±5% 1				
R639	RD3-9-3161-JH000	Carbon	39kΩ 1/6W ±5% 1				
R640	RH1-5-2102-JH003	Metal	1.5kΩ 1W ±5% 1				
R641	RD1-5-4161-JH000	Carbon	150kΩ 1/6W ±5% 1				
R642	RD1-0-3161-JH000	Carbon	10kΩ 1/6W ±5% 1				
R643	RD2-2-3161-JH000	Carbon	22kΩ 1/6W ±5% 1				
R644	RD2-2-3161-JH000	Carbon	22kΩ 1/6W ±5% 1				
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P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty	Ref. No.	Part No.	Description	Q'ty	
	131-2-5205-22504	Cushion	1	D323	202-5-1420-00128	Diode, GMA 01	1	
	131-2-6101-31700	Plate Shield	1	D324	202-5-1420-00128	Diode, GMA 01	1	
CAPACITORS				D325	4-2029-72121	L.E.D., SLP 253 B (LW)	1	
C312	CI1-0-3160-NG01R	Boundary	0.01μF 16V ±30%	1	D326	202-5-3160-00110	Diode, GMA 01	1
C313	CI1-0-3160-NG01R	Boundary	0.01μF 16V ±30%	1	IC301	ITT---TD63-01AP-	IC, TD 6301AP	1
C314	CI1-0-3160-NG01R	Boundary	0.01μF 16V ±30%	1	IC302	207-5-6474-91310	IC, LC 4913B	1
C315	CI1-0-3160-NG01R	Boundary	0.01μF 16V ±30%	1	IC303	4-2069-72920	IC, TC 9145P	1
C316	CI1-0-3160-NG01R	Boundary	0.01μF 16V ±30%	1	IC304	4-2069-73780	IC, M 5226P	1
C317	CI2-2-3160-NG00R	Boundary	0.022μF 16V ±30%	1	IC305	4-2069-73780	IC, M 5226P	1
C318	CD1-0-5500-0002V	Electrolytic	1μF 50V	1	Q301	203-5-5210-53650	Transistor, 2SC 536	1
C319	4-2239-71280	Electrolytic	1000μF 16V	1	Q302	203-5-5210-53650	Transistor, 2SC 536	1
C320	CC1-0-2500-KE01R	Ceramic	0.001μF 50V ±10%	1	Q303	203-5-5210-53650	Transistor, 2SC 536	1
C321	CC1-0-2500-KE01R	Ceramic	0.001μF 50V ±10%	1	Q304	203-5-5210-53650	Transistor, 2SC 536	1
C322	CD3-3-5250-0002V	Electrolytic	3.3μF 25V	1	Q305	203-5-5210-53650	Transistor, 2SC 536	1
C323	CD3-3-5250-0002V	Electrolytic	3.3μF 25V	1	Q306	203-5-5210-53650	Transistor, 2SC 536	1
C324	CM6-8-3500-J00TV	Mylar	0.068μF 50V ±5%	1	Q307	203-5-2620-60850	Transistor, 2SA 608	1
C325	CM6-8-3500-J00TV	Mylar	0.068μF 50V ±5%	1	Q308	203-5-2620-60850	Transistor, 2SA 608	1
C326	CM1-8-3500-J00TV	Mylar	0.018μF 50V ±5%	1	Q309	203-5-5210-53650	Transistor, 2SC 536	1
C327	CM1-8-3500-J00TV	Mylar	0.018μF 50V ±5%	1	Q310	203-5-5210-53650	Transistor, 2SC 536	1
C328	CI3-9-2160-NF01R	Boundary	0.0039μF 16V ±30%	1	Q311	4-2039-72330	Transistor, 2SD 1225	1
C329	CI3-9-2160-NF01R	Boundary	0.0039μF 16V ±30%	1	Q312	4-2039-72330	Transistor, 2SD 1225	1
C330	CC1-0-2500-KE01R	Ceramic	0.001μF 50V ±10%	1	Q313	4-2039-70951	Transistor, 2SC 2878	1
C331	CC1-0-2500-KE01R	Ceramic	0.001μF 50V ±10%	1	Q314	4-2039-70951	Transistor, 2SC 2878	1
C332	CC3-9-1500-KE01R	Ceramic	390pF 50V ±10%	1	Q315	203-5-5210-53650	Transistor, 2SC 536	1
C333	CC3-9-1500-KE01R	Ceramic	390pF 50V ±10%	1	Q316	203-5-2620-60850	Transistor, 2SA 608	1
C334	CD2-2-5500-0002V	Electrolytic	2.2μF 50V	1	Q317	4-2039-72330	Transistor, 2SD 1225	1
C335	CD2-2-5500-0002V	Electrolytic	2.2μF 50V	1	Q318	4-2039-70951	Transistor, 2SC 2878	1
C336	CM2-7-4500-J00TV	Mylar	0.27μF 50V ±5%	1	RESISTORS			
C337	CM2-7-4500-J00TV	Mylar	0.27μF 50V ±5%	1	R301	RD2-2-3161-JH000	Carbon 22kΩ 1/6W ±5%	1
C338	CM6-8-3500-J00TV	Mylar	0.068μF 50V ±5%	1	R302	RD3-3-3161-JH000	Carbon 33kΩ 1/6W ±5%	1
C339	CM6-8-3500-J00TV	Mylar	0.068μF 50V ±5%	1	R303	RD6-8-3161-JH000	Carbon 68kΩ 1/6W ±5%	1
C340	CM1-5-3500-J00TV	Mylar	0.015μF 50V ±5%	1	R304	RD4-7-1251-JH000	Carbon 470Ω 1/4W ±5%	1
C341	CM1-5-3500-J00TV	Mylar	0.015μF 50V ±5%	1	R305	RD8-2-1251-JH000	Carbon 820Ω 1/4W ±5%	1
C342	CI3-9-2160-NF01R	Boundary	0.0039μF 16V ±30%	1	R306	RD3-3-3161-JH000	Carbon 33kΩ 1/6W ±5%	1
C343	CI3-9-2160-NF01R	Boundary	0.0039μF 16V ±30%	1	R307	RD1-8-4161-JH000	Carbon 180kΩ 1/6W ±5%	1
C344	CI1-0-3160-NG01R	Boundary	0.01μF 16V ±30%	1	R308	RD1-0-3161-JH000	Carbon 10kΩ 1/6W ±5%	1
C345	CI1-0-3160-NG01R	Boundary	0.01μF 16V ±30%	1	R309	RD2-2-3161-JH000	Carbon 22kΩ 1/6W ±5%	1
C346	CI1-0-3160-NG01R	Boundary	0.01μF 16V ±30%	1	R310	RD4-7-2161-JH000	Carbon 4.7kΩ 1/6W ±5%	1
C347	CI1-0-3160-NG01R	Boundary	0.01μF 16V ±30%	1	R311	RD4-7-1161-JH000	Carbon 470Ω 1/6W ±5%	1
SEMICONDUCTORS				R312	RD4-7-2161-JH000	Carbon 4.7kΩ 1/6W ±5%	1	
D301	202-5-1420-00128	Diode, GMA 01	1	R313	RD4-7-2161-JH000	Carbon 4.7kΩ 1/6W ±5%	1	
D302	202-5-1420-00128	Diode, GMA 01	1	R314	RD3-3-3161-JH000	Carbon 33kΩ 1/6W ±5%	1	
D303	202-5-1420-00128	Diode, GMA 01	1	R315	RD3-3-3161-JH000	Carbon 33kΩ 1/6W ±5%	1	
D304	202-5-1420-00128	Diode, GMA 01	1	R316	RD2-7-2161-JH000	Carbon 2.7kΩ 1/6W ±5%	1	
D305	202-5-1420-00128	Diode, GMA 01	1	R317	RD2-7-2161-JH000	Carbon 2.7kΩ 1/6W ±5%	1	
D306	202-5-1420-00128	Diode, GMA 01	1	R318	RD2-7-2161-JH000	Carbon 2.7kΩ 1/6W ±5%	1	
D307	202-5-0220-01010	Diode, DSF 10 C	1	R319	RD2-7-2161-JH000	Carbon 2.7kΩ 1/6W ±5%	1	
D308	202-5-1420-00128	Diode, GMA 01	1	R320	RD1-0-4161-JH000	Carbon 100kΩ 1/6W ±5%	1	
D309	202-5-1420-00128	Diode, GMA 01	1	R321	RD1-0-4161-JH000	Carbon 100kΩ 1/6W ±5%	1	
D310	D00---SLP--273B-	L.E.D., SLP 273 B (Tuned)	1	R322	RD1-0-4161-JH000	Carbon 100kΩ 1/6W ±5%	1	
D311	D00---SLP--173B-	L.E.D., SLP 173 B (Stereo)	1	R323	RD1-5-3251-JM000	Carbon 15kΩ 1/4W ±5%	1	
D312	4-2029-72120	L.E.D., SLP 153 B (Auto Play)	1	R324	RD1-0-2251-JM000	Carbon 1kΩ 1/4W ±5%	1	
D313	4-2029-72121	L.E.D., SLP 253 B (Auto Tuning)	1	R325	RD6-8-1251-JM000	Carbon 680Ω 1/4W ±5%	1	
D314	4-2029-72121	L.E.D., SLP 253 B (MW)	1	R326	RD4-7-1251-JM000	Carbon 470Ω 1/4W ±5%	1	
D315	4-2029-72121	L.E.D., SLP 253 B (FM)	1	R327	RD4-7-3161-JH000	Carbon 47kΩ 1/6W ±5%	1	
D316	DYY---SLR--54PT-	L.E.D., SLR 54 PT (CD)	1	R328	RD4-7-3161-JH000	Carbon 47kΩ 1/6W ±5%	1	
D317	DYY---SLR--54PT-	L.E.D., SLR 54 PT (Tape)	1	R329	RD1-0-3161-JH000	Carbon 10kΩ 1/6W ±5%	1	
D318	DYY---SLR--54PT-	L.E.D., SLR 54 PT (Tuner)	1	R330	RD1-0-3161-JH000	Carbon 10kΩ 1/6W ±5%	1	
D319	DYY---SLR--54PT-	L.E.D., SLR 54 PT (Phono)	1	R331	RD2-2-2251-JM000	Carbon 2.2kΩ 1/4W ±5%	1	
D320	202-5-1420-00128	Diode, GMA 01	1	R332	RD2-2-3161-JH000	Carbon 22kΩ 1/6W ±5%	1	
D321	202-5-1420-00128	Diode, GMA 01	1	R333	RD2-2-3161-JH000	Carbon 22kΩ 1/6W ±5%	1	
D322	202-5-1420-00128	Diode, GMA 01	1	R334	RD1-2-3161-JH000	Carbon 12kΩ 1/6W ±5%	1	
				R335	RD6-8-2161-JH000	Carbon 6.8kΩ 1/6W ±5%	1	

P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty	Ref. No.	Part No.	Description	Q'ty		
R336	RD2-2-2161-JH000	Carbon	2.2kΩ 1/6W ±5%	1	SEMICONDUCTORS				
R337	RD2-2-2161-JH000	Carbon	2.2kΩ 1/6W ±5%	1	D101	202-5-1420-00128	Diode, GMA 01	1	
R338	RD1-0-3161-JH000	Carbon	10kΩ 1/6W ±5%	1	D102	202-5-1420-00128	Diode, GMA 01	1	
R339	RD1-0-3161-JH000	Carbon	10kΩ 1/6W ±5%	1	D103	202-5-2810-44210	Diode, DS 442	1	
R340	RD3-3-1161-JH000	Carbon	330Ω 1/6W ±5%	1	D104	202-5-3210-06213	Zener Diode, GZA 6.2 Z	1	
R341	RD3-3-1161-JH000	Carbon	330Ω 1/6W ±5%	1	D105	4-2029-74080	Diode, ISS 201	1	
R342	RD2-7-1161-JH000	Carbon	270Ω 1/6W ±5%	1	D106	202-5-1420-00128	Diode, GMA 01	1	
R343	RD2-7-1161-JH000	Carbon	270Ω 1/6W ±5%	1	D107	202-5-1420-00128	Diode, GMA 01	1	
R344	RD2-7-1161-JH000	Carbon	270Ω 1/6W ±5%	1	IC101	4-2069-73930	IC, TC 9147BP	1	
R345	RD2-7-1161-JH000	Carbon	270Ω 1/6W ±5%	1	IC102	ITT---TD61-04P--	IC, TD 6104P	1	
R346	RD2-7-1161-JH000	Carbon	270Ω 1/6W ±5%	1	Q101	203-5-7200-60850	Transistor, 2SA 608	1	
R347	RD2-7-1161-JH000	Carbon	270Ω 1/6W ±5%	1	Q102	203-5-5000-53650	Transistor, 2SC 536	1	
R348	RD2-2-1161-JH000	Carbon	220Ω 1/6W ±5%	1	Q103	TTT---2SC1-627AY	Transistor, 2SC 1627	1	
R349	RD2-2-1161-JH000	Carbon	220Ω 1/6W ±5%	1	Q104	203-5-6540-04430	FET, 2SK 44	1	
R350	RD1-5-3161-JH000	Carbon	15kΩ 1/6W ±5%	1	Q105	203-5-5251-57080	Transistor, 2SC 1570	1	
R351	RD4-7-3161-JH000	Carbon	47kΩ 1/6W ±5%	1	Q106	203-5-5000-53650	Transistor, 2SC 536	1	
R352	RD4-7-2161-JH000	Carbon	4.7kΩ 1/6W ±5%	1	Q107	203-5-5000-53650	Transistor, 2SC 536	1	
R353	RD3-3-3161-JH000	Carbon	33kΩ 1/6W ±5%	1	Q108	203-5-4921-01270	Transistor, 2SD 1012	1	
R354	RD2-7-2161-JH000	Carbon	2.7kΩ 1/6W ±5%	1	Q110	203-5-5000-53660	Transistor, 2SC 536	1	
R355	RD2-7-2161-JH000	Carbon	2.7kΩ 1/6W ±5%	1	Q111	203-5-5000-53660	Transistor, 2SC 536	1	
R356	RD1-0-3161-JH000	Carbon	10KΩ 1/6W ±5%	1	Q112	4-2039-72310	Transistor, DTC 114	1	
R357	RD2-2-3161-JH000	Carbon	22kΩ 1/6W ±5%	1	Q113	203-5-4921-01270	Transistor, 2SD 1012	1	
R358	RD1-2-3161-JH000	Carbon	12kΩ 1/6W ±5%	1	RESISTORS				
RA1	4-2219-71400	Resistor	20kΩx12 ±5%	1	R101	RD1-0-3161-JH000	Carbon	10kΩ 1/6W ±5%	1
RA2	4-2219-71410	Resistor	20kΩx10 ±5%	1	R102	RD3-3-3161-JH000	Carbon	33kΩ 1/6W ±5%	1
MEMORY P.C.B. ASSY					R103	RD1-0-2161-JH000	Carbon	1kΩ 1/6W ±5%	1
63	141-0-1939-10311	Memory P.C.B. Assy		1	R104	RD1-0-5161-JH000	Carbon	1MΩ 1/6W ±5%	1
	4-2262-23080	Memory P.C.B.		1	R105	RD1-2-1251-JM000	Carbon	120Ω 1/4W ±5%	1
VR10	4-2229-73145	Potentiometer (B-1kΩ)		1	R106	RD6-8-0251-JS000	Carbon	68Ω 1/4W ±5%	1
XT1	4-2252-00080	Crystal 7.2MHz		1	R107	RD6-8-1251-JM000	Carbon	680Ω 1/4W ±5%	1
L101	4-2532-00211	Choke Coil (33mH)		1	R108	RD4-7-1161-JH000	Carbon	470Ω 1/6W ±5%	1
CA101	4-2359-78723	Connector 10P Assy [PL8W]		1	R109	RD1-0-2161-JH000	Carbon	1kΩ 1/6W ±5%	1
PL101	4-2369-74300	Connector 10P		1	R110	RD5-6-2161-JH000	Carbon	5.6kΩ 1/6W ±5%	1
PL102	4-2369-73130	Connector 3P		1	R111	RD2-7-2161-JH000	Carbon	2.7kΩ 1/6W ±5%	1
	4-2369-75550	Plug Cord RCA		1	R112	RD2-7-2161-JH000	Carbon	2.7kΩ 1/6W ±5%	1
	4-2439-72739	Wire 6 Parallel		1	R113	RD1-0-3161-JH000	Carbon	10kΩ 1/6W ±5%	1
	4-2439-72740	Wire 3 Parallel		1	R114	RD1-0-1161-JH000	Carbon	100Ω 1/6W ±5%	1
CAPACITORS					R115	RD4-7-1161-JH000	Carbon	470Ω 1/6W ±5%	1
C101	CI1-0-3160-NG01R	Boundary	0.01μF 16V ±30%	1	R116	RD6-8-3161-JH000	Carbon	68kΩ 1/6W ±5%	1
C102	CD1-0-7160-0006V	Electrolytic	100μF 16V	1	R117	RD6-8-3161-JH000	Carbon	68kΩ 1/6W ±5%	1
C103	CI4-7-3250-MF00C	Boundary	0.047μF 25V ±20%	1	R118	RD4-7-2161-JH000	Carbon	4.7kΩ 1/6W ±5%	1
C104	CI4-7-3250-MF00C	Boundary	0.047μF 25V ±20%	1	R119	RD6-8-2161-JH000	Carbon	6.8kΩ 1/6W ±5%	1
C105	CD3-3-7160-0006V	Electrolytic	330μF 16V	1	R120	RD6-8-2161-JH000	Carbon	6.8kΩ 1/6W ±5%	1
C106	CD4-7-6160-0006V	Electrolytic	47μF 16V	1	R121	RD4-7-2161-JH000	Carbon	4.7kΩ 1/6W ±5%	1
C107	CD4-7-6160-0006V	Electrolytic	47μF 16V	1	R122	RD4-7-2161-JH000	Carbon	4.7kΩ 1/6W ±5%	1
C108	CC2-2-3500-ZG00C	Ceramic	0.022μF 50V +80,-20%	1	R123	RD4-7-2161-JH000	Carbon	4.7kΩ 1/6W ±5%	1
C109	CC2-2-3500-ZG00C	Ceramic	0.022μF 50V +80,-20%	1	R124	RD4-7-2161-JH000	Carbon	4.7kΩ 1/6W ±5%	1
C110	CC2-7-0500-KD00C	Ceramic	27pF 50V ±10%	1	R125	RD6-8-2161-JH000	Carbon	6.8kΩ 1/6W ±5%	1
C111	CC2-2-3500-ZG00C	Ceramic	0.022μF 50V +80,-20%	1	R126	RD6-8-2161-JH000	Carbon	6.8kΩ 1/6W ±5%	1
C112	CD3-3-6160-0001V	Electrolytic	33μF 16V	1	R127	RD1-0-4161-JH000	Carbon	100kΩ 1/6W ±5%	1
C113	CI1-0-3160-NG01R	Boundary	0.01μF 16V ±30%	1	R138	RD6-8-2161-JH000	Carbon	6.8kΩ 1/6W ±5%	1
C114	CD2-2-763A-0006V	Electrolytic	220μF 6.3V	1	R139	RD4-7-2161-JH000	Carbon	4.7kΩ 1/6W ±5%	1
C115	CD2-2-5500-0001V	Electrolytic	2.2μF 50V	1	R140	RD1-0-4161-JH000	Carbon	100kΩ 1/6W ±5%	1
C116	CC2-7-0500-KCH0C	Ceramic	27pF 50V ±10%	1	R142	RD3-3-2161-JH000	Carbon	3.3kΩ 1/6W ±5%	1
C117	CC2-7-0500-KCH0C	Ceramic	27pF 50V ±10%	1	R143	RD5-6-3161-JH000	Carbon	56kΩ 1/6W ±5%	1
C118	CD1-0-5500-0001V	Electrolytic	1μF 50V	1	R144	RD1-0-3161-JH000	Carbon	10kΩ 1/6W ±5%	1
C119	CD1-0-5500-0001V	Electrolytic	1μF 50V	1	R146	RD1-0-3161-JH000	Carbon	10kΩ 1/6W ±5%	1
C120	CD2-2-8100-0001V	Electrolytic	2200μF 10V	1	R147	RD1-2-2161-JH000	Carbon	1.2kΩ 1/6W ±5%	1
C128	CC1-0-3500-KE00C	Ceramic	0.01μF 50V ±10%	1	R148	RD4-7-3161-JH000	Carbon	47kΩ 1/6W ±5%	1
C129	CC2-2-3500-ZG00C	Ceramic	0.022μF 50V +80,-20%	1	R149	RD4-7-4161-JH000	Carbon	470kΩ 1/6W ±5%	1
C130	CC2-2-3500-ZG00C	Ceramic	0.022μF 50V +80,-20%	1					

P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty	Ref. No.	Part No.	Description	Q'ty
DOLBY SWITCH P.C.B. ASSY				REC IND. P.C.B. ASSY			
64	141-0-1939-10340	Dolby Switch P.C.B. Assy	1	67	141-0-1939-10360	Rec Ind. P.C.B. Assy	1
	4-2262-23110	Dolby Switch P.C.B.	1		4-2262-23140	Rec Ind. P.C.B.	1
S801	4-2319-77850	Switch Push 1Key (Dolby NR)	1		4-2439-72737	Wire 2 Parallel	1
S802	4-2319-78340	Slide Switch 2-3 (Deck 2 Tape Selector)	1	SEMICONDUCTOR			
CA801	4-2359-78724	Connector 5P Assy [PL15K]	1	D1	4-2029-72120	L.E.D., SLP 153 B (Record)	1
CA802	4-2359-78726	Connector 2P Assy [PL701]	1	VOLUME P.C.B. ASSY			
CA803	4-2359-78727	Connector 2P Assy [PL11W]	1	68	141-0-1939-10380	Volume P.C.B. Assy	1
CAPACITOR					4-2262-23160	Volume P.C.B.	1
C801	CD2-2-6250-0002V	Electrolytic 22 μ F 25V	1	VR1	4-2229-75910	Slide Volume (B-100k Ω x2, Volume)	1
SEMICONDUCTOR				CA3	4-2359-78720	Connector 3P Assy [PL10R]	1
D801	202-5-1420-00128	Diode, GMA 01	1	CAPACITORS			
RESISTORS				C1	CM5-6-3500-J00TV	Mylar 0.056 μ F 50V \pm 5%	1
R801	RH2-7-1501-JZ003	Metal 270 Ω 1/2W \pm 5%	1	C2	CM5-6-3500-J00TV	Mylar 0.056 μ F 50V \pm 5%	1
R802	RH1-0-1501-JZ003	Metal 100 Ω 1/2W \pm 5%	1	RESISTORS			
R803	RD3-9-2161-JH000	Carbon 3.9k Ω 1/6W \pm 5%	1	R1	RD2-2-3161-JH000	Carbon 22k Ω 1/6W \pm 5%	1
R804	RD8-2-3161-JH000	Carbon 82k Ω 1/6W \pm 5%	1	R2	RD2-2-3161-JH000	Carbon 22k Ω 1/6W \pm 5%	1
R805	RD1-0-2251-JM000	Carbon 1k Ω 1/4W \pm 5%	1	BEAT SWITCH P.C.B. ASSY			
LEVEL IND. P.C.B. ASSY				69	141-0-1939-11550	Beat Switch P.C.B. Assy	1
65	141-0-1939-10320	Level Ind. P.C.B. Assy	1		4-2262-24390	Beat Switch P.C.B.	1
	4-2262-23090	Level Ind. P.C.B.	1	S6	4-2319-76690	Switch Slide 2-2 (Beat Cancel)	1
CA1	4-2359-77800	Connector 4P Assy [PL12W]	1	PL72W	4-2359-78479	Connector 2P Assy	1
	131-2-6113-50600	Shelter	1	BIAS OSC P.C.B. ASSY			
CAPACITORS				107	141-0-1939-10351	Bias OSC P.C.B. Assy	1
C1	CD1-0-6160-0002V	Electrolytic 10 μ F 16V	1		4-2262-23120	Bias OSC P.C.B.	1
C2	CD1-0-6160-0002V	Electrolytic 10 μ F 16V	1	T701	4-2589-72350	OSC Coil 85kHz	1
SEMICONDUCTORS				VR701	4-2229-75560	Potentiometer (B-100k Ω)	1
D1	D00---SLP--258B-	L.E.D., SLP 258 B (Peak Level)	1	VR702	4-2229-75560	Potentiometer (B-100k Ω)	1
D2	D00---SLP--258B-	L.E.D., SLP 258 B (Peak Level)	1	L701	4-2532-00040	Choke Coil (1mH)	1
D3	D00---SLP--258B-	L.E.D., SLP 258 B (Peak Level)	1	CA701	4-2359-77800	Connector 4P Assy [PL14W]	1
D4	D00---SLP--258B-	L.E.D., SLP 258 B (Peak Level)	1	CA702	4-2359-78672	Connector 3P Assy [PL16W]	1
D5	D00---SLP--258B-	L.E.D., SLP 258 B (Peak Level)	1	PL701	4-2362-00770	Plug 2P	1
D6	D00---SLP--258B-	L.E.D., SLP 258 B (Peak Level)	1	PL702	4-2362-00770	Plug 2P	1
D7	D00---SLP--158B-	L.E.D., SLP 158 B (Peak Level)	1	PL72W	4-2362-00770	Plug 2P	1
D8	D00---SLP--158B-	L.E.D., SLP 158 B (Peak Level)	1	CAPACITORS			
D9	D00---SLP--158B-	L.E.D., SLP 158 B (Peak Level)	1	C701	CC2-2-1500-KE00R	Ceramic 220pF 50V \pm 10%	1
D10	D00---SLP--158B-	L.E.D., SLP 158 B (Peak Level)	1	C702	CC2-2-1500-KE00R	Ceramic 220pF 50V \pm 10%	1
IC1	206-5-2591-40310	IC, LB 1403	1	C703	CD1-0-6250-0001V	Electrolytic 10 μ F 25V	1
IC2	206-5-2591-40310	IC, LB 1403	1	C704	CM1-0-3500-K00SV	Mylar 0.01 μ F 50V \pm 10%	1
RESISTORS				C705	CI3-3-2500-NF00R	Boundary 0.0033 μ F 50V \pm 30%	1
R1	RD1-0-3161-JH000	Carbon 10k Ω 1/6W \pm 5%	1	C706	CI3-3-2500-NF00R	Boundary 0.0033 μ F 50V \pm 30%	1
R2	RD1-0-3161-JH000	Carbon 10k Ω 1/6W \pm 5%	1	C707	CM1-0-3500-K00SV	Mylar 0.01 μ F 50V \pm 10%	1
HEADPHONE P.C.B. ASSY				C708	CC4-7-1500-KE00C	Ceramic 470pF 50V \pm 10%	1
66	141-0-1939-10330	Headphone P.C.B. Assy	1	C709	CD4-7-4500-0001V	Electrolytic 0.47 μ F 50V	1
	4-2262-23100	Headphone P.C.B.	1	C710	CD4-7-4500-0001V	Electrolytic 0.47 μ F 50V	1
	4-2352-01591	Jack 7P 6.43 (Headphones)	1	C711	CD4-7-6160-0001V	Electrolytic 47 μ F 16V	1
	131-0-4006-31407	Cord Assy	1	C712	CB1-0-6160-0000V	None-polar 10 μ F 16V	1
RESISTORS				C713	CP1-0-3101-J003V	Polypropylen 0.01 μ F 100V \pm 5%	1
R1	RH3-3-1501-JZ003	Metal 330 Ω 1/2W \pm 5%	1	C714	CC6-8-1500-KD00C	Ceramic 680pF 50V \pm 10%	1
R2	RH3-3-1501-JZ003	Metal 330 Ω 1/2W \pm 5%	1	SEMICONDUCTORS			
R3	RH2-7-1501-JZ003	Metal 270 Ω 1/2W \pm 5%	1	D701	202-5-1420-00128	Diode, GMA 01	1
R4	RH2-7-1501-JZ003	Metal 270 Ω 1/2W \pm 5%	1	D702	202-5-9620-44621	Diode, DS 446	1
				IC701	206-5-1242-00010	IC, LA 2000	1

P.C.BOARD PARTS LIST (Continued)

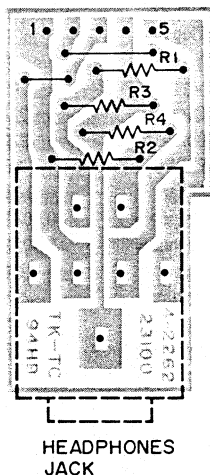
Ref. No.	Part No.	Description	Q'ty
Q701	203-5-5000-53660	Transistor, 2SC 536	1
Q702	203-5-5000-53660	Transistor, 2SC 536	1
Q703	203-5-5000-53660	Transistor, 2SC 536	1
RESISTORS			
R701	RD1-0-0161-JV000	Carbon 10Ω 1/6W ±5%	1
R702	RD1-0-0161-JV000	Carbon 10Ω 1/6W ±5%	1
R703	RD2-2-3161-JH000	Carbon 22kΩ 1/6W ±5%	1
R704	RD2-2-3161-JH000	Carbon 22kΩ 1/6W ±5%	1
R705	RD1-5-4161-JH000	Carbon 150kΩ 1/6W ±5%	1
R706	RD1-8-1251-JM000	Carbon 180Ω 1/4W ±5%	1
R707	RD3-9-2161-JH000	Carbon 3.9kΩ 1/6W ±5%	1
R708	RD6-8-2161-JH000	Carbon 6.8kΩ 1/6W ±5%	1
R709	RD2-2-2161-JH000	Carbon 2.2kΩ 1/6W ±5%	1
MUTING P.C.B. ASSY			
131	141-0-1939-12170	Muting P.C.B. Assy	1
	4-2262-24850	Muting P.C.B.	1
CN901	4-2369-73140	Connector 4P	1
CAPACITOR			
C951	CD1-0-5500-0001V	Electrolytic 1μF 50V	1

Ref. No.	Part No.	Description	Q'ty
SEMICONDUCTORS			
D950	202-5-1420-00128	Diode, GMA 01	1
D951	202-5-1420-00128	Diode, GMA 01	1
Q950	203-5-7200-60860	Transistor, 2SA 608	1
Q951	203-5-4921-01270	Transistor, 2SD 1012	1
Q952	203-5-7200-60860	Transistor, 2SA 608	1
RESISTORS			
R951	RD1-0-4161-JH000	Carbon 100kΩ 1/6W ±5%	1
R952	RD1-0-3161-JH000	Carbon 10kΩ 1/6W ±5%	1
R953	RD1-0-3161-JH000	Carbon 10kΩ 1/6W ±5%	1
R954	RD2-2-3161-JH000	Carbon 22kΩ 1/6W ±5%	1
R955	RD1-0-3161-JH000	Carbon 10kΩ 1/6W ±5%	1
R956	RD2-2-3161-JH000	Carbon 22kΩ 1/6W ±5%	1
R957	RD4-7-3161-JH000	Carbon 47kΩ 1/6W ±5%	1
R958	RD3-3-4161-JH000	Carbon 330kΩ 1/6W ±5%	1
R959	RD1-0-2161-JH000	Carbon 1kΩ 1/6W ±5%	1

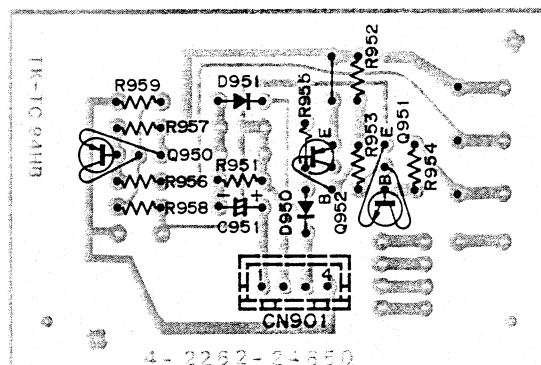
NOTES:

1. Parts order must contain Model Number, Part Number and Description.
2. Ordering quantity of screws and resistors must be multiple of 10 pcs.

HEADPHONE P.C.BOARD (BOTTOM VIEW)

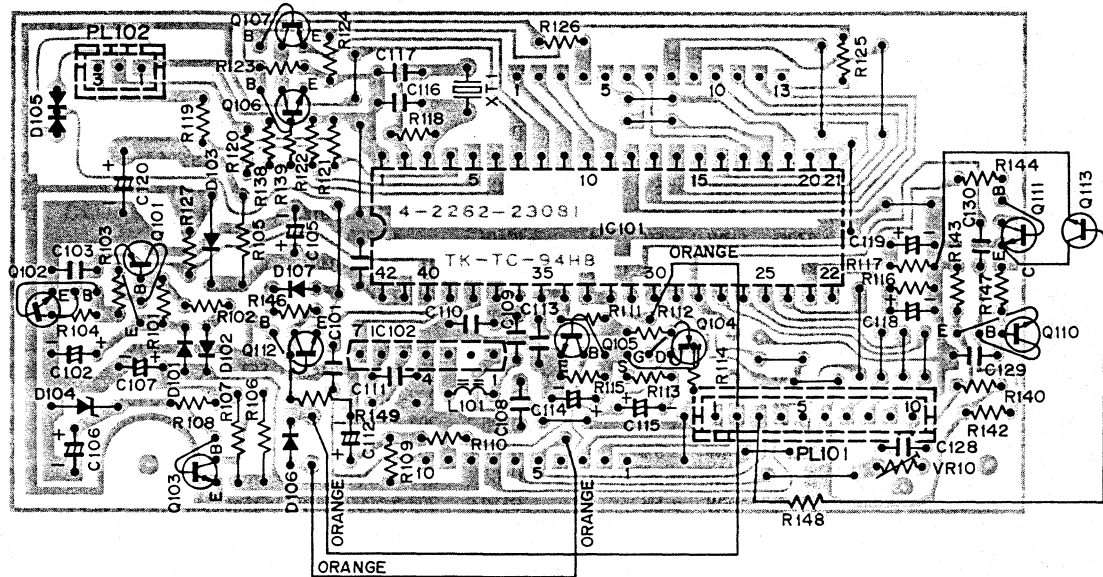


MUTING P.C.BOARD (BOTTOM VIEW)



MEMORY P.C.BOARD

(BOTTOM VIEW)

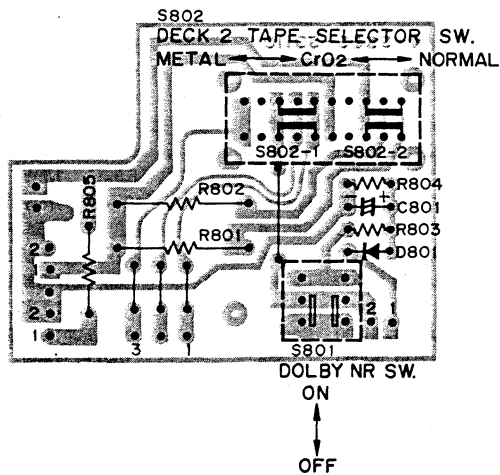


IC PIN NUMBERS DC VOLTAGES								
SYMBOL No.	DEVICE	1	2	3	4	5	6	7
IC102	TD6104P	5.8V	5.2V	4.9V	0V	4.3V	4.3V	1.8V

TRANSISTOR DC VOLTAGES									
SYMBOL No.	DEVICE	B	C	E	SYMBOL No.	DEVICE	B	C	E
Q101	2SA608	11.5V	0V	11.5V	Q105	2SC1570	0.6V	1.4V	0V
Q102	2SC536	0.3V	0.3V	0V	Q106	2SC536	0V	5.8V	0V
Q103	2SC1627	0.7V	10.7V	5.8V	Q107	2SC536	4.4V	5.8V	4.7V
Q104	2SK44	0.9V	5.6V	0.6V					

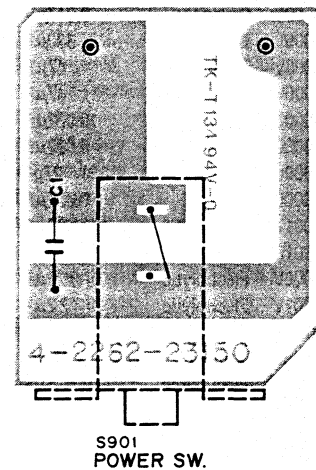
DOLBY SWITCH P.C.BOARD

(BOTTOM VIEW)

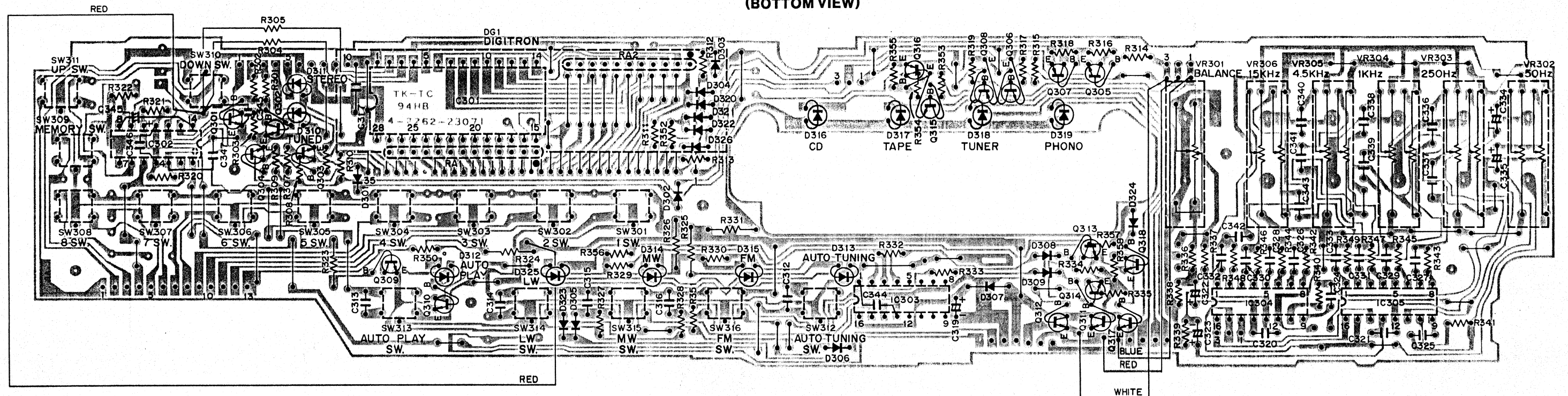


AC SWITCH P.C.BOARD

(BOTTOM VIEW)



GRAPHIC DISPLAY P.C.BOARD (BOTTOM VIEW)



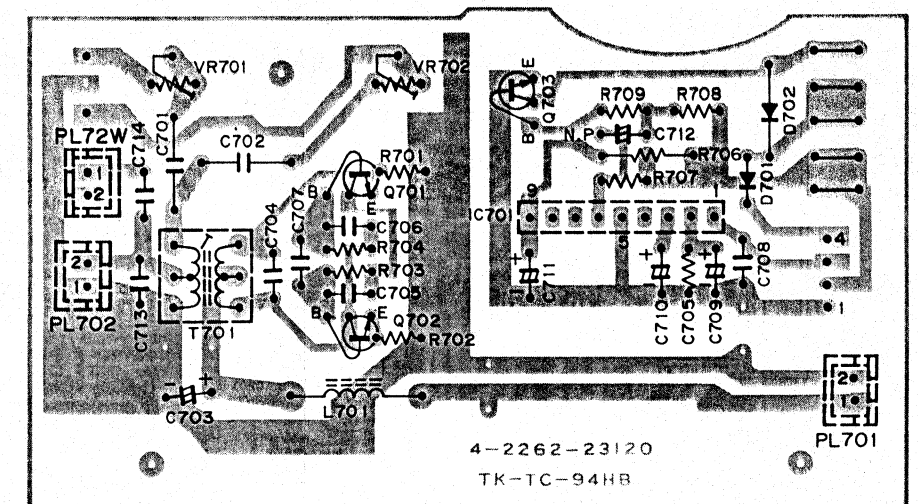
IC PIN NUMBERS DC VOLTAGES

SYMBOL No.	DEVICE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
IC301	TD6301AP	0V	0V	0V	0V	0.7V	17.0V	16.8V	16.8V	16.8V	16.8V	16.6V	17.0V	17.0V	0V	16.9V	16.9V	16.8V	16.7V	16.8V	16.8V
		21	22	23	24	25	26	27	28												
		0.7V	16.8V	16.7V	16.7V	16.6V	16.6V	17.0V	5.8V												
IC302	LC4913B	10.7V	0V	0V	0V	0V	0.2V	0V	0.2V	0V	0V	0.2V	0V	10.8V	11.0V						
IC303	TC9145P	0V	0.4V	2.1V	1.3V	1.3V	1.3V	1.3V	1.3V	1.3V	1.3V	1.3V	1.3V	0V	0V	0V	11.2V				
IC304,305	M5226P	-0.2V	-0.9V	-0.2V	-0.9V	-0.2V	-0.9V	-0.2V	-0.9V	-0.2V	-0.9V	0V	0V	0V	10.2V	0V	-11.2V				

TRANSISTOR DC VOLTAGES

SYMBOL No.	DEVICE	B	C	E	SYMBOL No.	DEVICE	B	C	E	SYMBOL No.	DEVICE	B	C	E
Q301	2SC536	0.6V	0V	0V	Q305,306	2SC536	0.7V	0.1V	0V	Q311	2SD1225	0V	11.1V	0.1V
Q302	2SC536	0V	4.3V	0V	Q307,308	2SA608	17.8V	18.6V	18.6V	Q312	2SD1225	9.8V	11.1V	9.2V
Q303	2SC536	0V	16.6V	0V	Q309	2SC536	0V	9.5V	0V	Q313	2SC2878	0.7V	0V	0V
Q304	2SC536	0.7V	0V	0V	Q310	2SC536	0.7V	0.1V	0V	Q314	2SC2878	0.6V	9.8V	0V

BIAS OSC P.C.BOARD (BOTTOM VIEW)



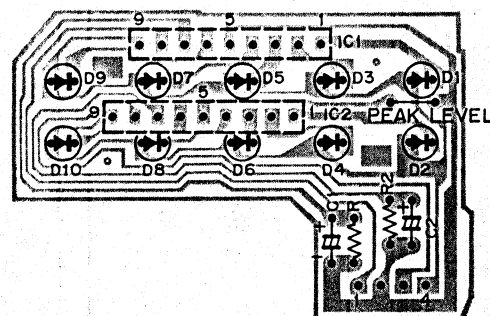
IC PIN NUMBERS DC VOLTAGES

SYMBOL No.	DEVICE	1	2	3	4	5	6	7	8	9
IC701	LA2000	0.2V	0.2V	0.2V	0.2V	0V	11.8V	0.3V	0.3V	0.3V

TRANSISTOR DC VOLTAGES

SYMBOL No.	DEVICE	B	C	E
Q701,702	2SC536	0V	0V	0V
Q703	2SC536	0.7V	0V	0V

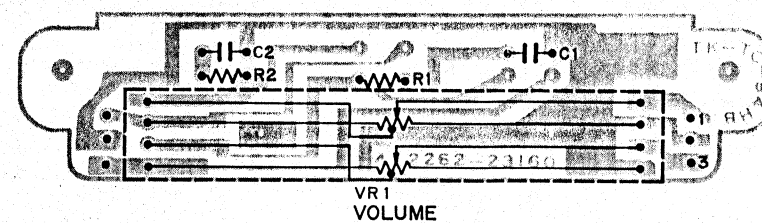
LEVEL IND. P.C.BOARD (BOTTOM VIEW)



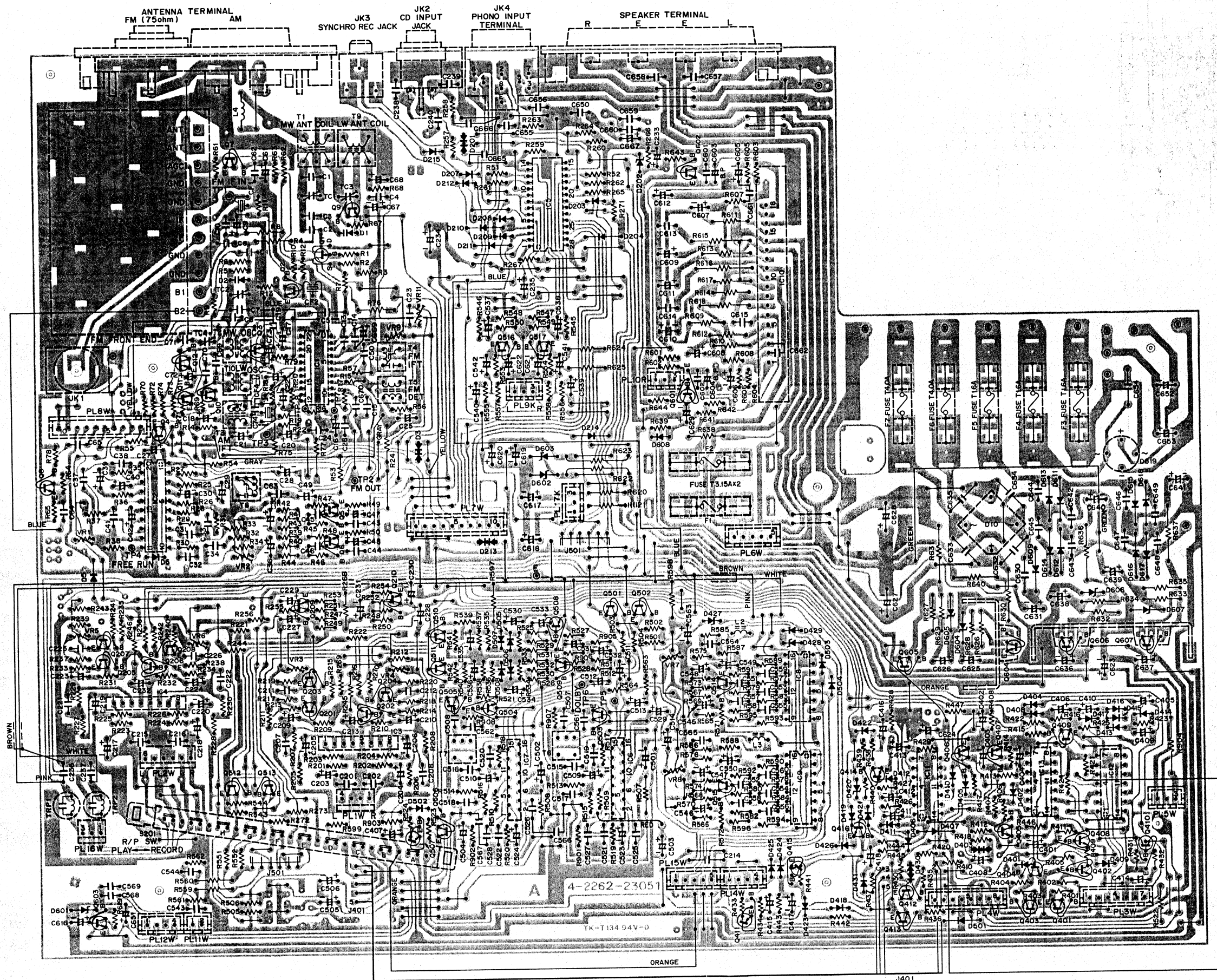
IC PIN NUMBERS DC VOLTAGES

SYMBOL No.	DEVICE	1	2	3	4	5	6	7	8	9
IC1,2	LB1403	5.6V	5.6V	5.6V	5.6V	0V	5.6V	0V	0V	7.1V

VOLUME P.C.BOARD (BOTTOM VIEW)



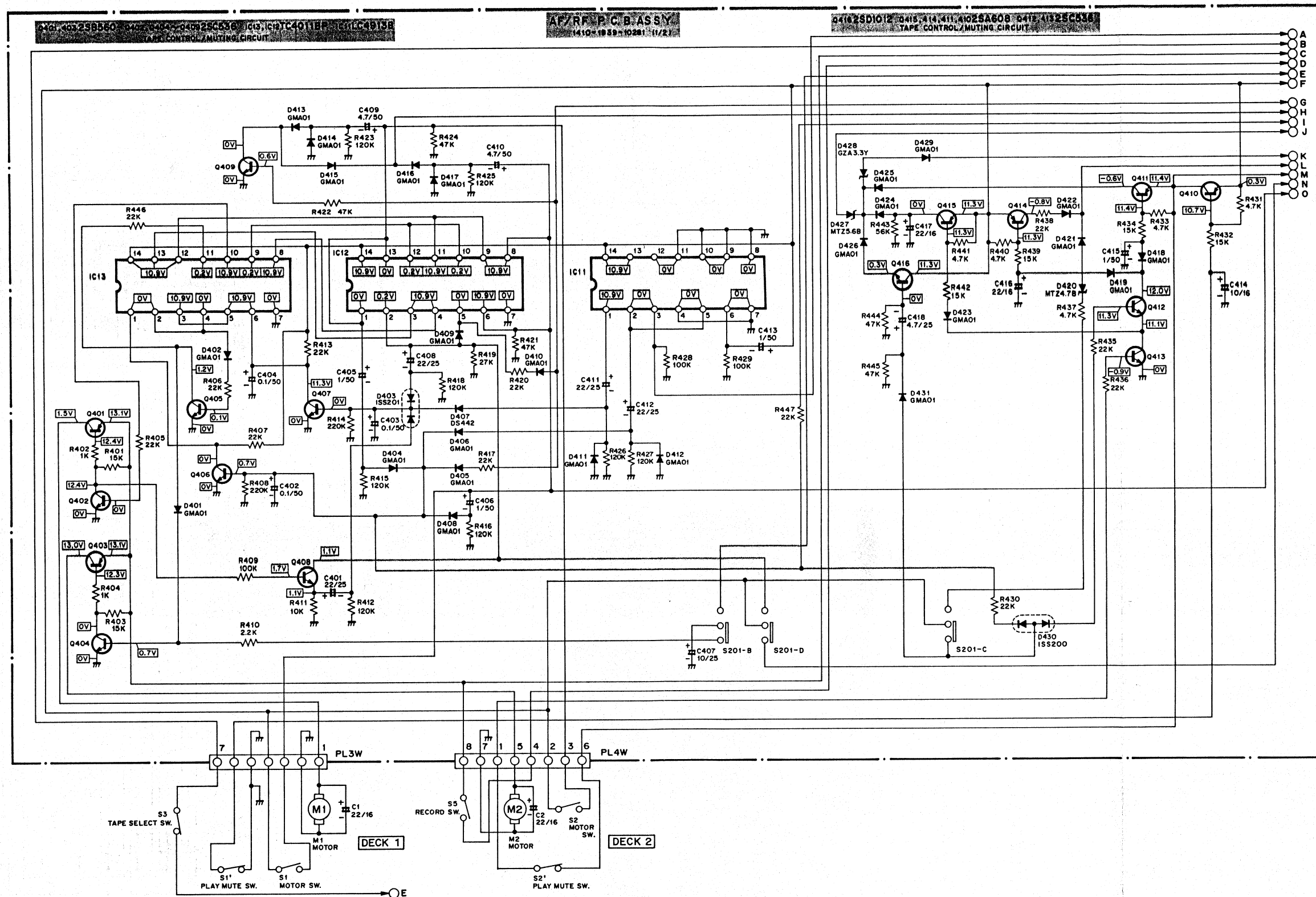
AF/RF PRINTED CIRCUIT BOARD (BOTTOM VIEW)



		IC PIN NUMBERS DC VOLTAGES																					
SYMBOL No.	DEVICE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
IC1	LA1265	2.2V	2.2V	2.2V	0V	9.9V	9.9V	9.9V	7.0V	3.5V	3.0V	1.4V	1.3V	0.3V	0.4V	2.2V	1.3V	9.8V	0V	0V	3.7V	2.5V	
IC2	LA3390	11.3V	4.4V	4.4V	0.3V	0V	0V	4.3V	4.1V	4.3V	4.1V	2.7V	0V	4.3V	2.3V	2.3V	2.2V	2.3V	0V	2.3V	4.2V		
IC3	LA3160	1.3V	0.8V	5.9V	8.3V	0V	5.9V	0.8V	1.3V	4.9V	4.8V	4.9V	0.8V	4.9V	4.9V	4.9V	0V						
IC6	TA7403P	4.9V	4.9V	5.4V	4.9V	4.8V	9.8V	4.8V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V			
IC8	TD62504P	7.0V	7.0V	11.8V	0V	-27.0V	-1.3V	3.8V	-29.2V	-30.0V	-30.0V	0V	29.6V	28.0V	-30.0V	-1.3V	0V	-0.1V	-0.1V				
IC10	STK4131	-0.1V	-0.1V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	10.9V	10.9V	0V						
IC11	LC4913B	10.9V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	10.9V	10.9V	0V						
IC12	TC4011BP	0V	0.2V	10.9V	10.9V	0V	10.9V	0V	10.9V	10.9V	0.2V	10.9V	0.2V	0V	10.9V	10.9V	0V						

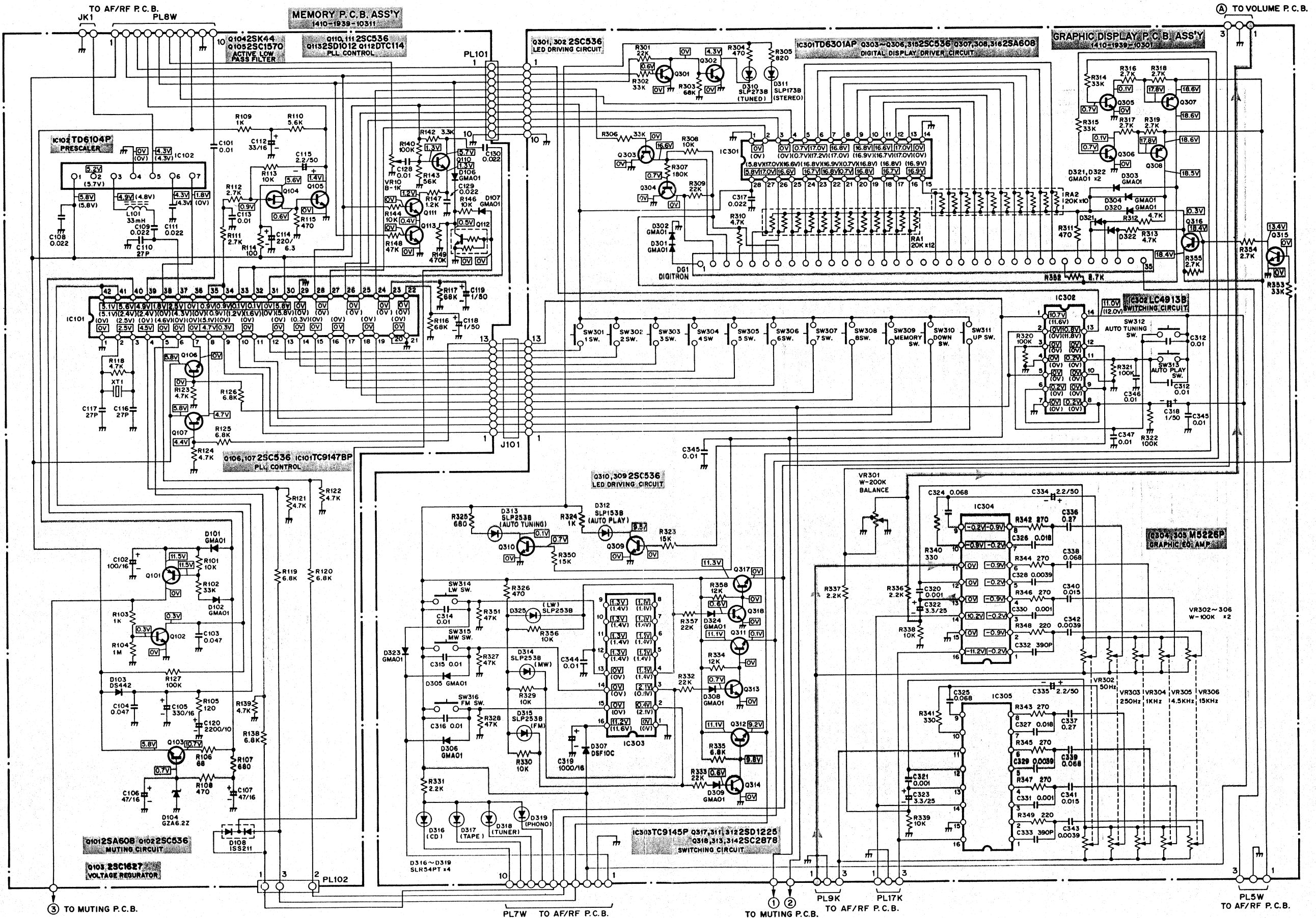
SCHEMATIC DIAGRAM

(TAPE CONTROL/MUTING CIRCUIT SECTION)

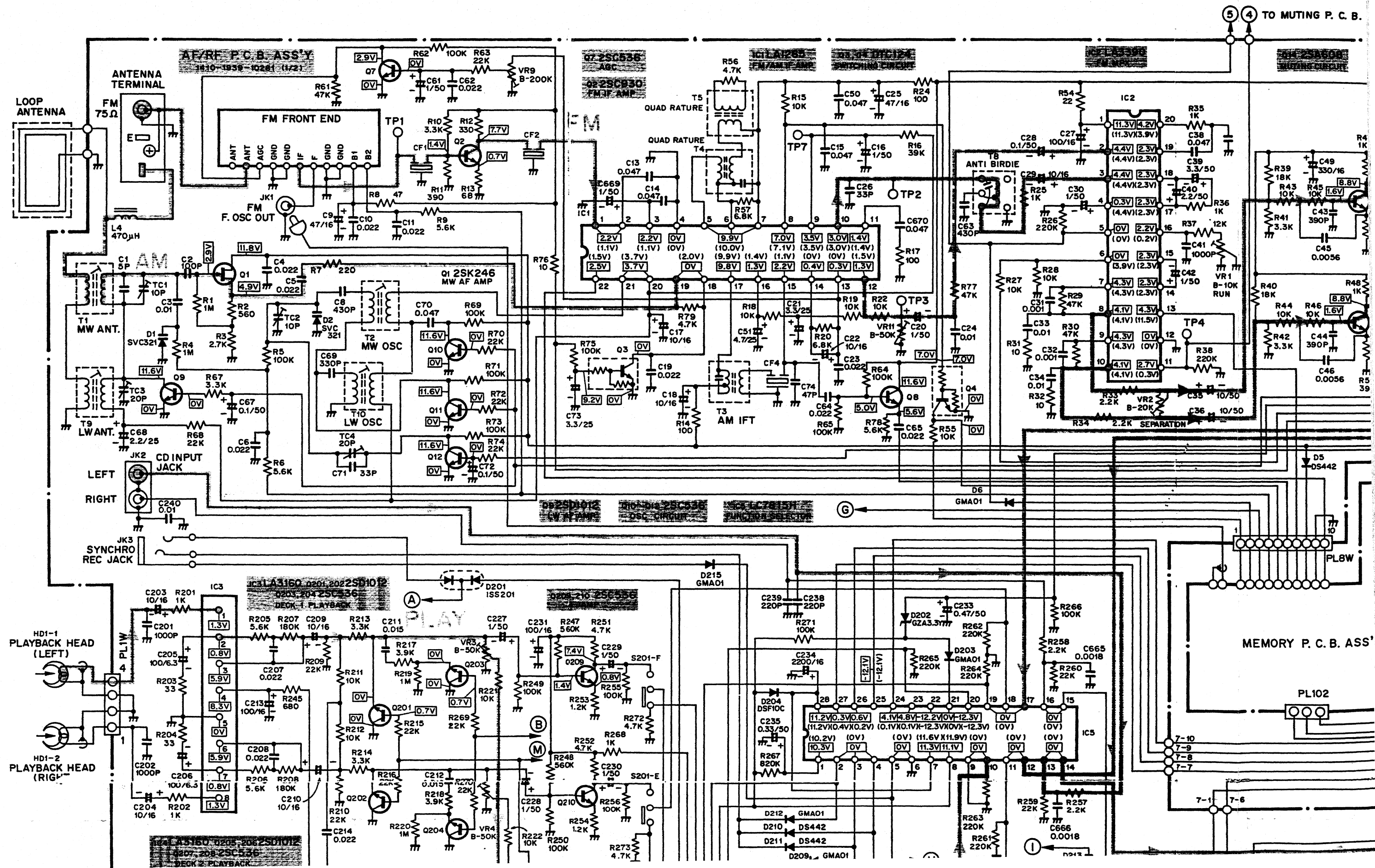


SCHEMATIC DIAGRAM (Continued)

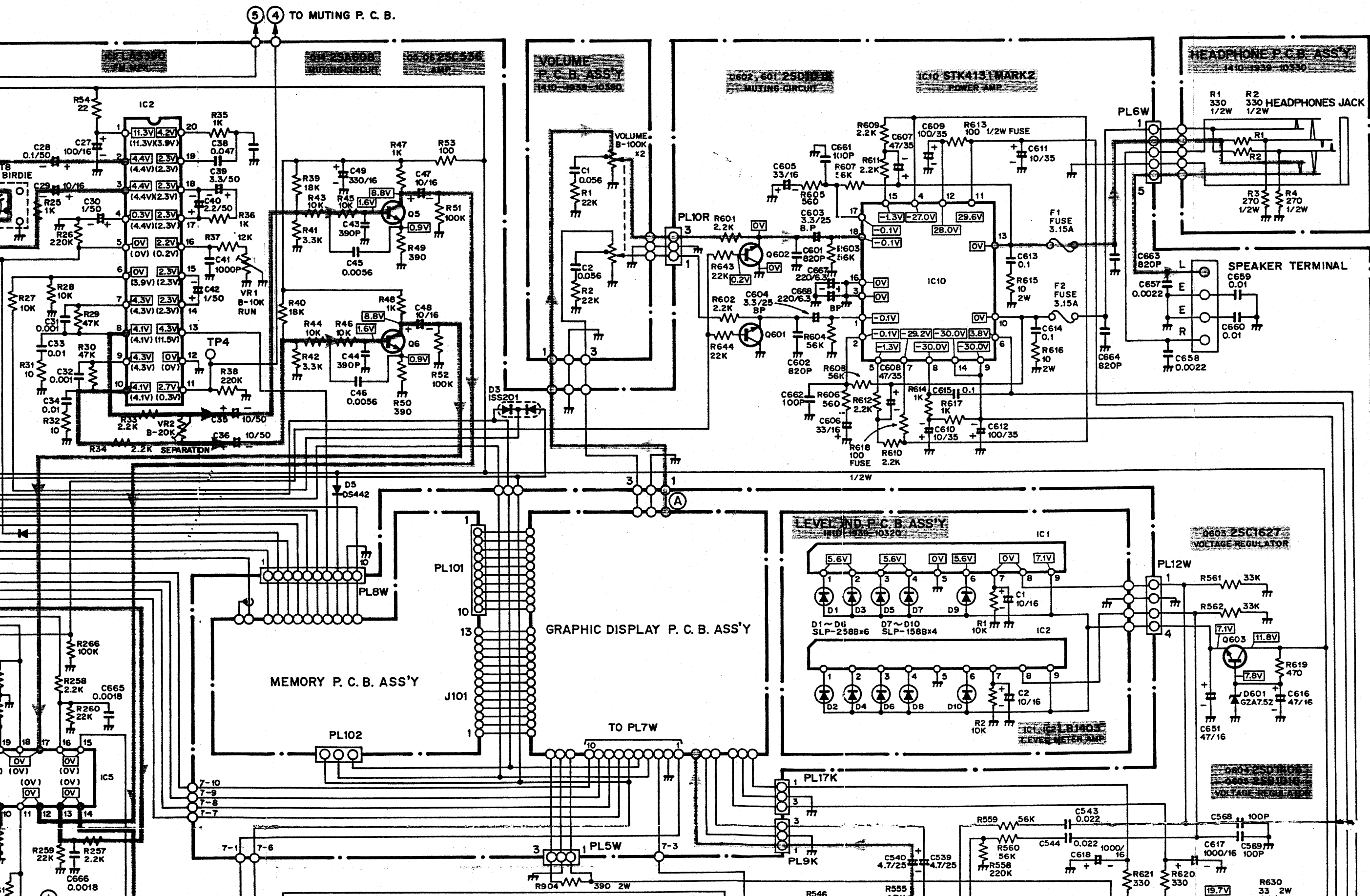
(MEMORY/GRAPHIC DISPLAY SECTION)

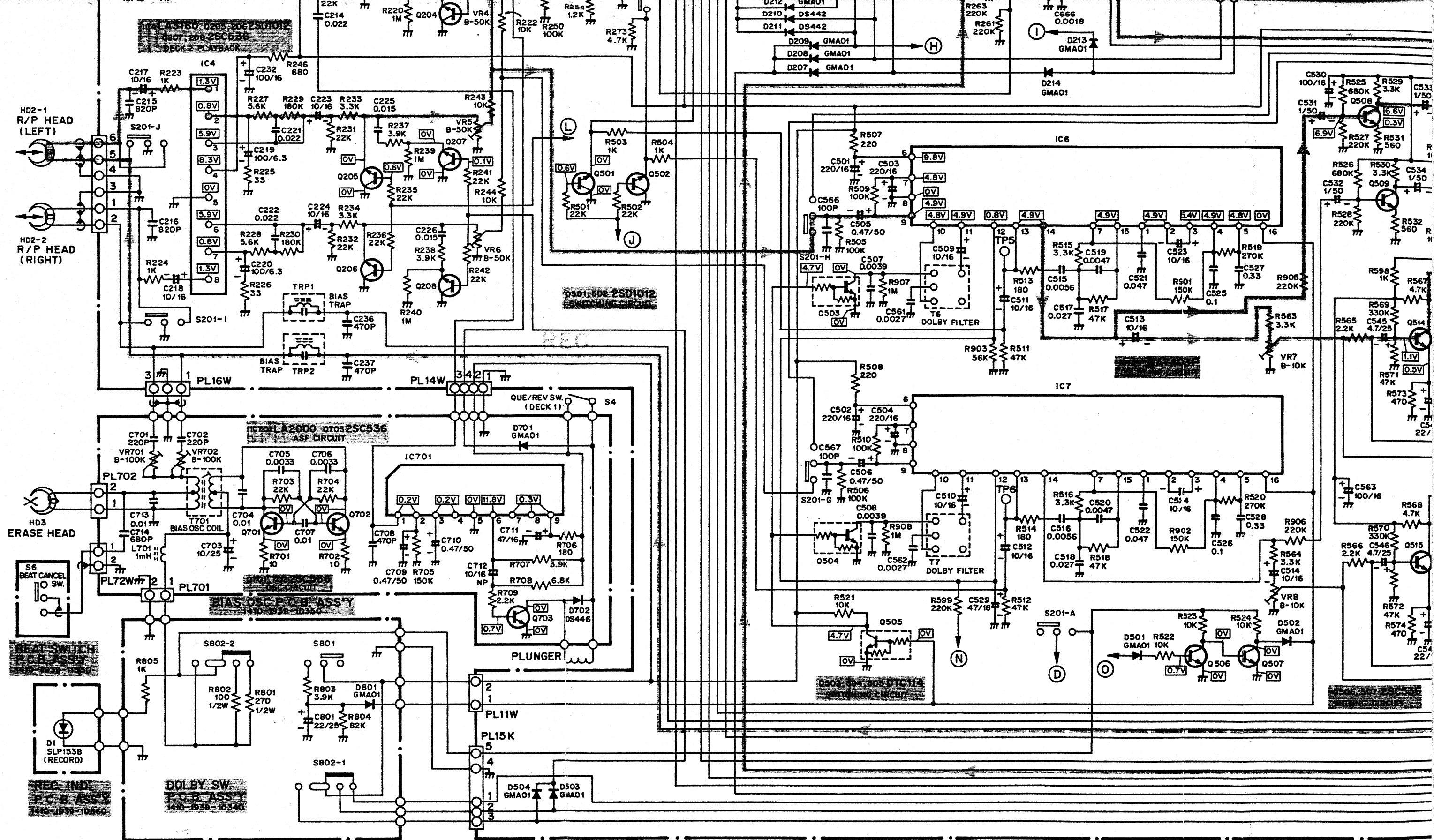


TAC-M22 SCHEMATIC



C-M22 SCHEMATIC DIAGRAM

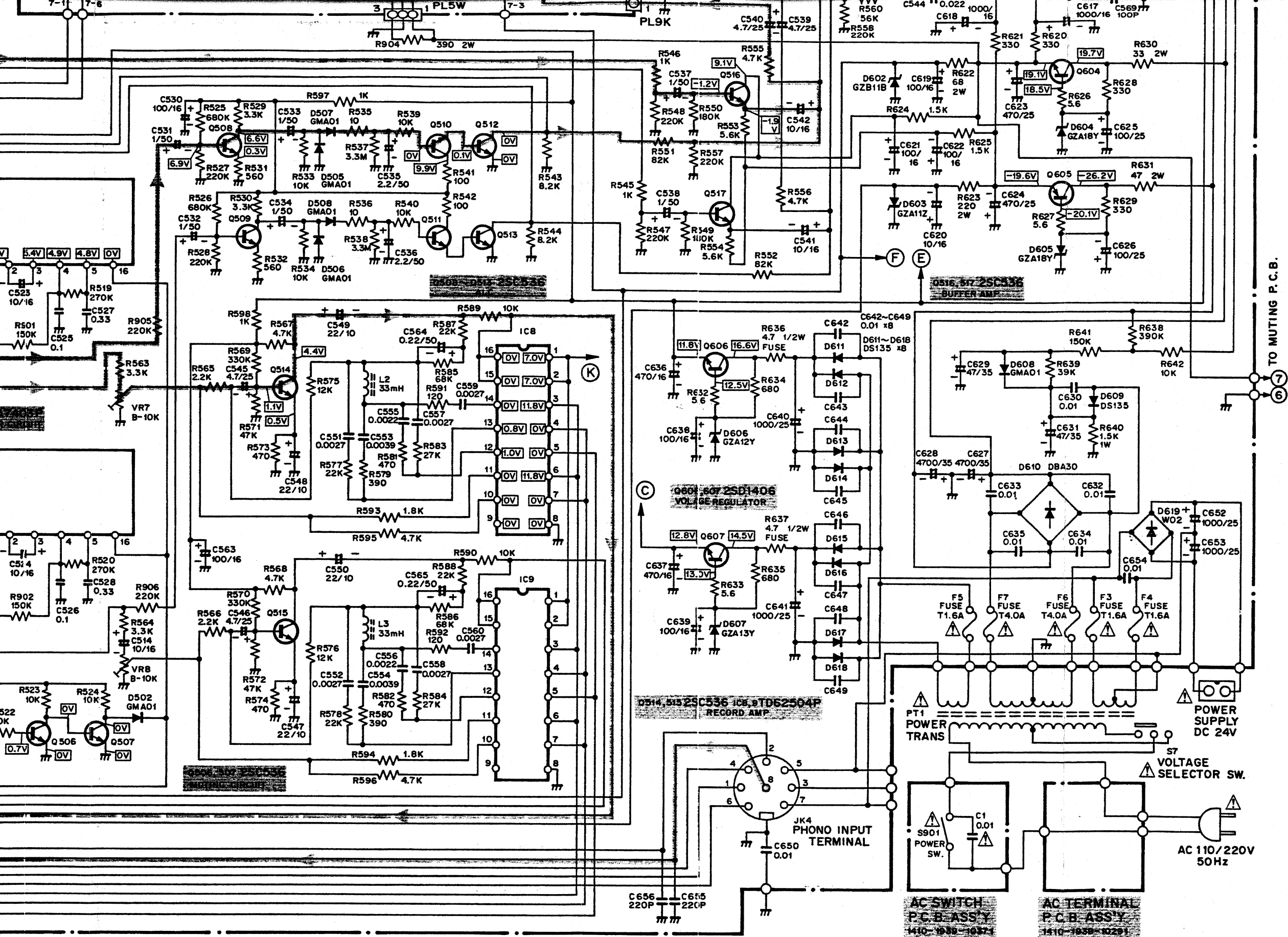





No.	Name	Position	No.	Name	Position	No.	Name	Position
S201	RECORD/PLAY Switch	PLAY	SW310	DOWN Switch	OFF	S1	MOTOR Switch (Deck 1)	OFF
SW301	PRESET 1 Switch	OFF	SW311	UP Switch	OFF	S1'	PLAY MUTE Switch (Deck 1)	OFF
SW302	PRESET 2 Switch	OFF	SW312	AUTO TUNING Switch	OFF	S3	TAPE SELECT Switch (Deck 1)	OFF
SW303	PRESET 3 Switch	OFF	SW313	AUTO PLAY Switch	OFF	S4	QUE/REV Switch (Deck 1)	OFF
SW304	PRESET 4 Switch	OFF	SW314	LW Switch	OFF	S2	MOTOR Switch (Deck 2)	OFF
SW305	PRESET 5 Switch	OFF	SW315	MW Switch	OFF	S2'	PLAY MUTE Switch (Deck 2)	OFF
SW306	PRESET 6 Switch	OFF	SW316	FM Switch	OFF	S5	RECORD Switch (Deck 2)	OFF
SW307	PRESET 7 Switch	OFF	S801	DOLBY NR Switch	OFF	S6	BEAT CANCEL Switch	-
SW308	PRESET 8 Switch	OFF	S802	TAPE SELECT Switch (Deck 2)	NORM	S7	AC SELECTOR Switch	220V
SW309	MEMORY Switch	OFF	S901	POWER Switch	OFF			

PRODUCT SAFETY NOTICE

Each precaution in this manual should be followed during servicing. Components identified in the parts list and the schematic diagram designate components in which safety can be of special importance. Use only the replacement parts designated, or parts of equivalent value, wattage or voltage that are designated in the parts list in this manual. Leakage-current or resistance measurements must be made to determine that exposed parts are safe from the supply circuit before returning the product to the customer.



PRODUCT SAFETY NOTICE

be followed during servicing. Components identified with the IEC symbol  in the designate components in which safety can be of special significance. When replace only the replacement parts designated, or parts with the same ratings of resistance in the parts list in this manual. Measurements must be made to determine that exposed parts are acceptably insulated from the product to the customer.

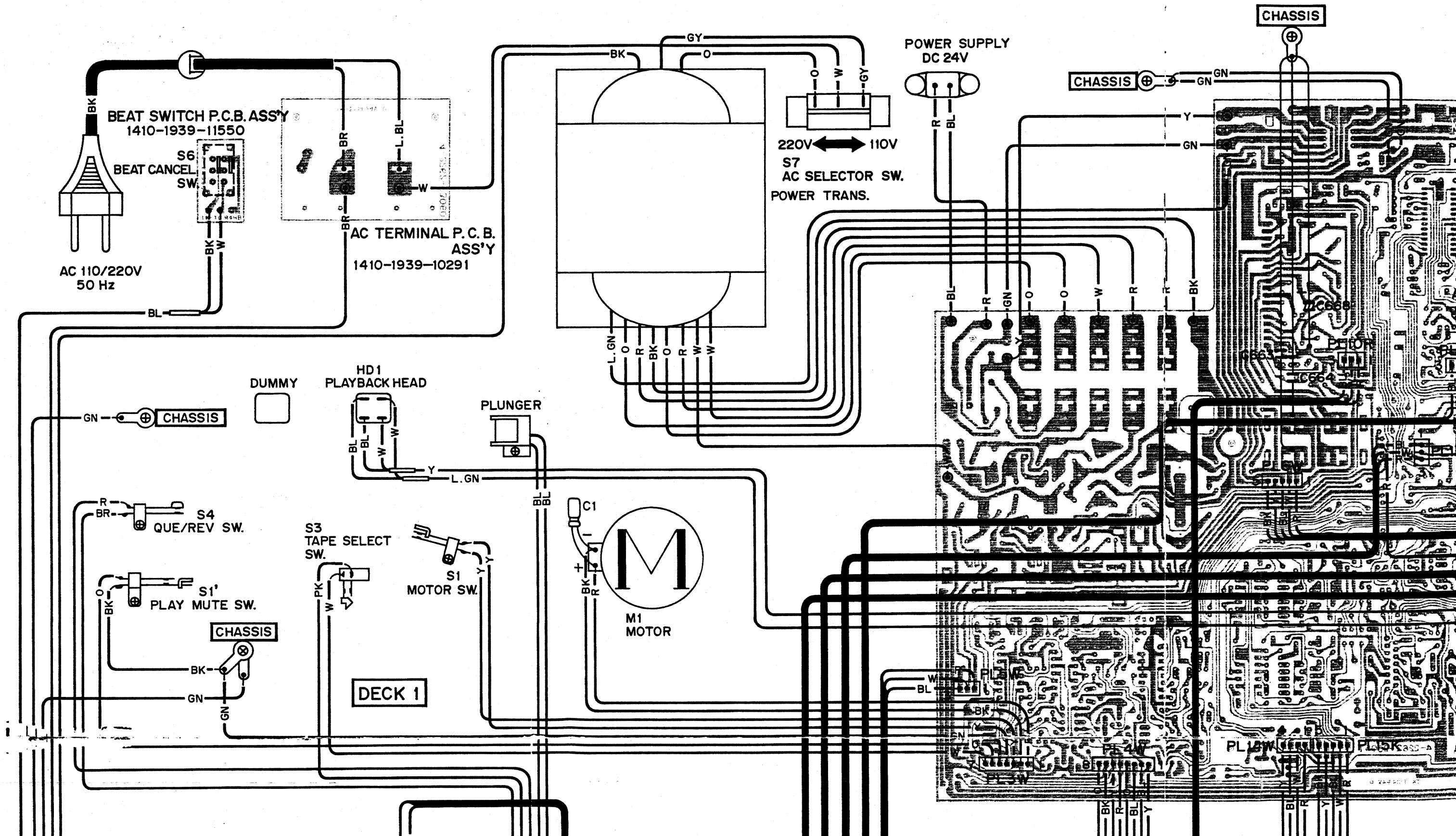
NOTES:

1. All resistors values are indicated in "ohm" (K=10³, M=10⁶).
2. All capacitors values are indicated in "μF" (P=10⁻¹²).
3. All voltages indicated on the schematics are measured under the following conditions.
 - a. Use a V.T.V.M.

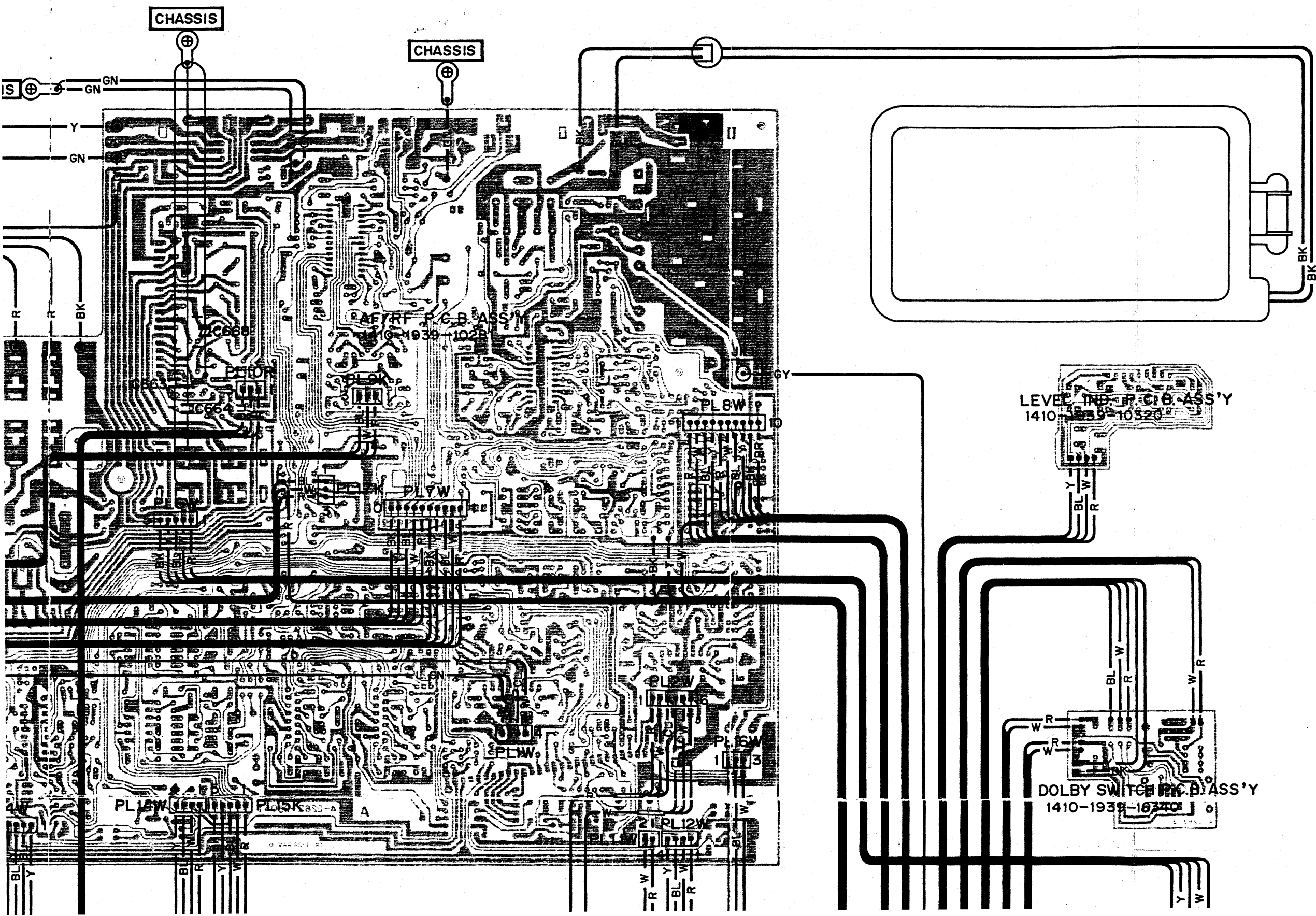
Because Fisher products are subject to continuous improvement, Fisher Corporation reserves the right to make any changes or modifications without notice.

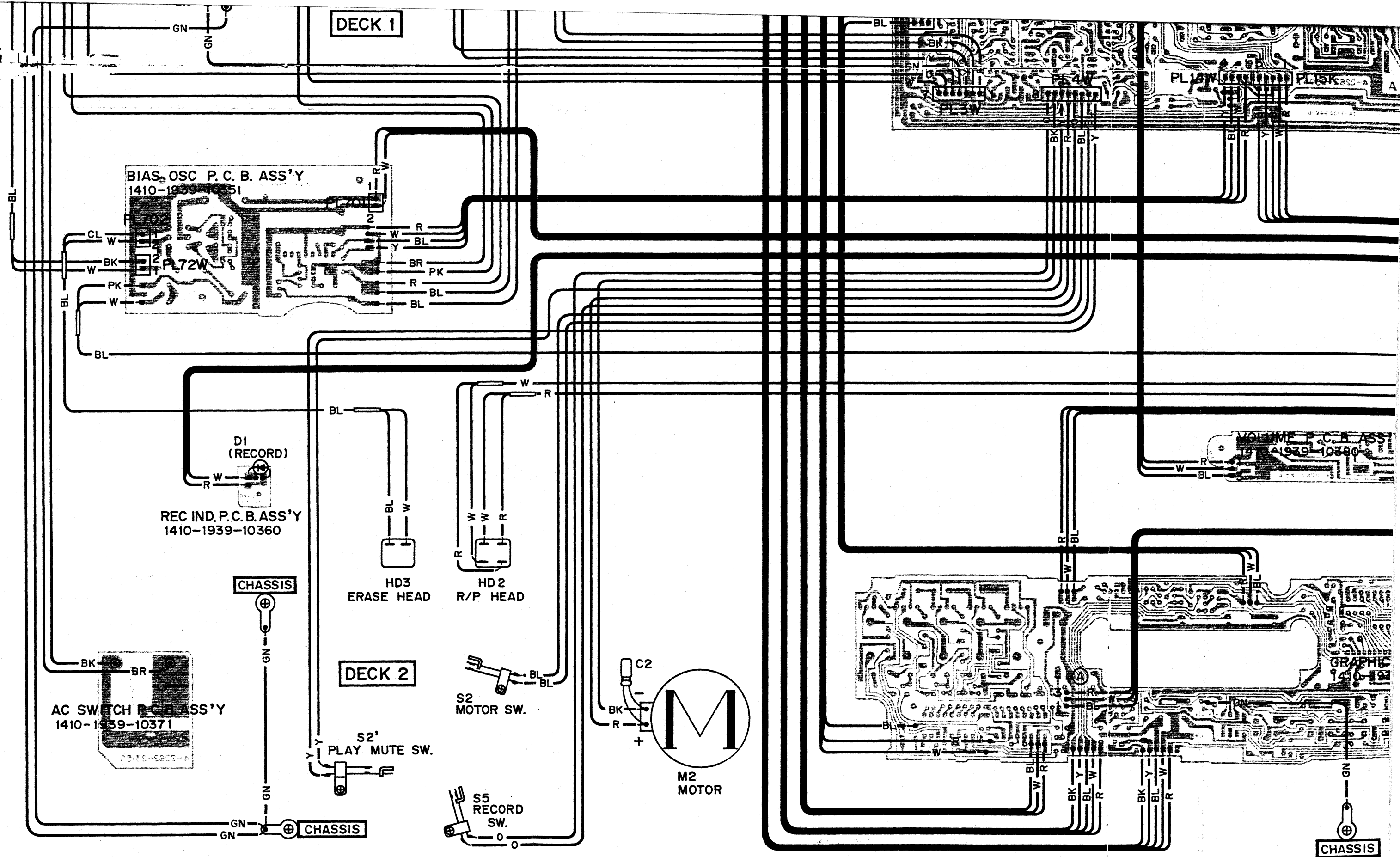
- b. All voltages ±10% with respect to chassis ground.
- c. No signals at input terminals.
- d. AC input at 220 volts 50 Hz
4. This is a basic schematic diagram.

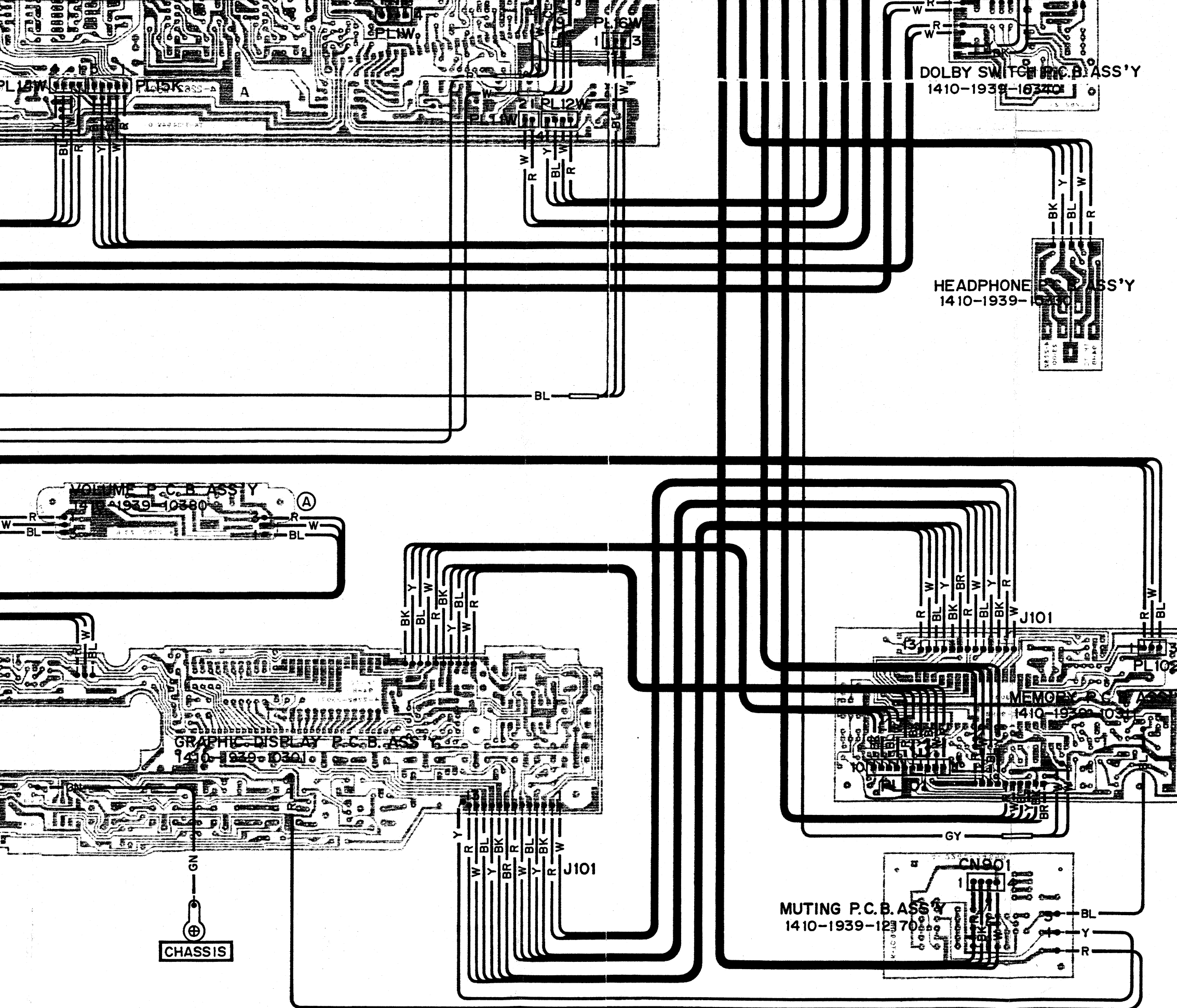
POINT TO POINT WIRING



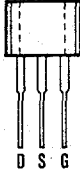
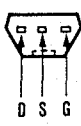
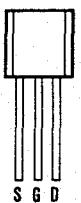
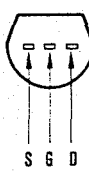
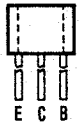
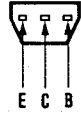
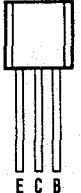
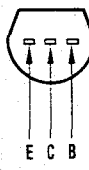
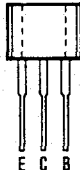
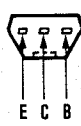
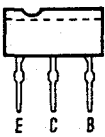
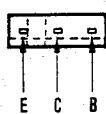
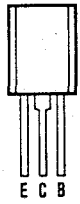
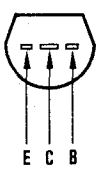
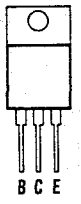

POINT WIRING DIAGRAM



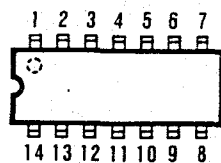




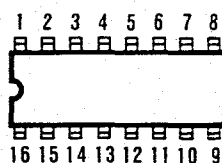
SEMICONDUCTOR LEAD IDENTIFICATION

TRANSISTOR	FRONT VIEW	BOTTOM VIEW	TRANSISTOR	FRONT VIEW	BOTTOM VIEW
2SK 44			2SK 246		
DTC 114 DTC 124			2SA 608 2SC 536 2SC 930 2SC 1570 2SC 2878		
2SC 536 2SA 608 2SD 1012			2SD 1225		
2SB 560 2SC 1627			2SB 1016 2SD 1406		
TERMINAL NAME					
B → BASE C → COLLECTOR E → EMITTER			S → SOURCE G → GATE D → DRAIN		

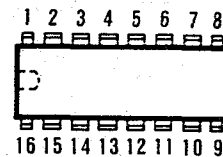
LC 4913 B BOTTOM VIEW



TC 9145 P / TD 62504 P BOTTOM VIEW

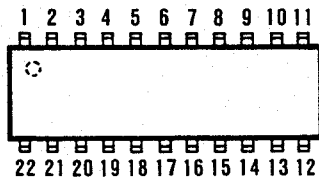


M 5226 P BOTTOM VIEW

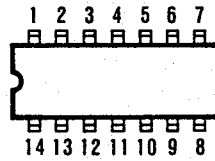


SEMICONDUCTOR LEAD IDENTIFICATION (Continued)

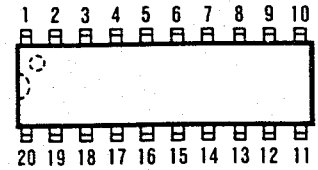
LA 1265 BOTTOM VIEW



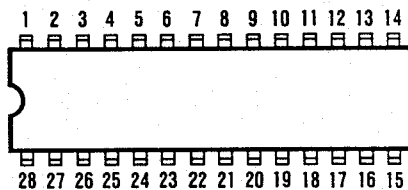
TC 4011 BP BOTTOM VIEW



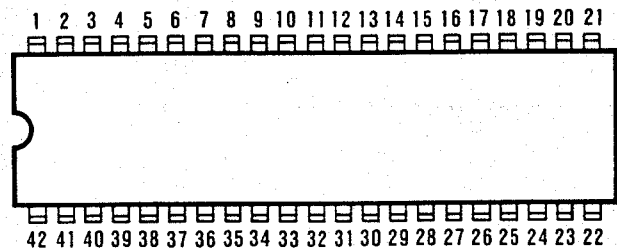
LA 3390 BOTTOM VIEW



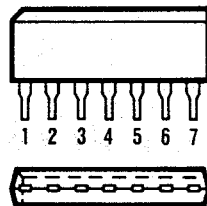
LC 7815 H / TD 6301 AP BOTTOM VIEW



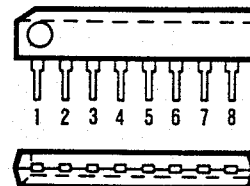
TC 9147 BP BOTTOM VIEW



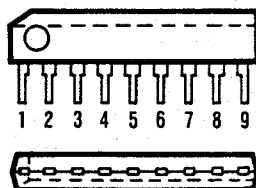
TD 6104 P FRONT/BOTTOM VIEWS



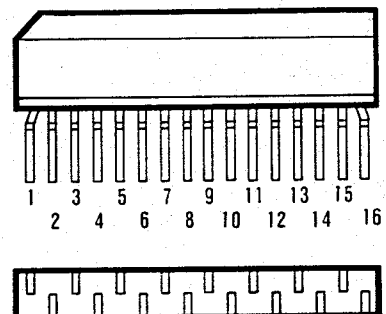
LA 3160 FRONT/BOTTOM VIEWS



LA 2000 / LB 1403 FRONT/BOTTOM VIEWS

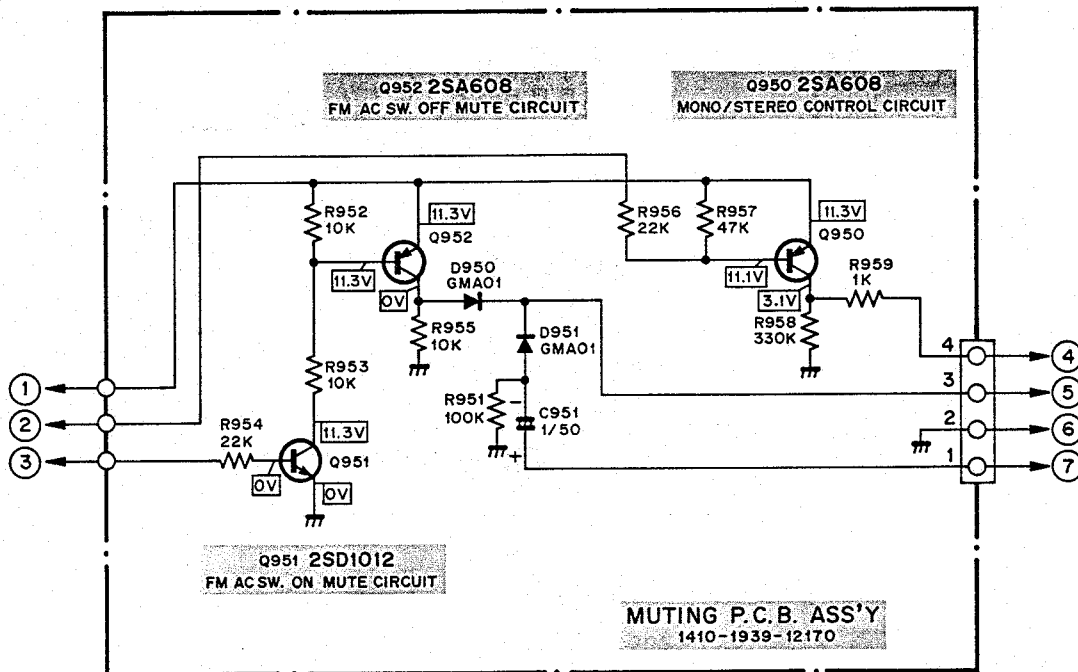


TA 7403 P FRONT/BOTTOM VIEWS



SCHEMATIC DIAGRAM

(FM MUTING/MODE CONTROL CIRCUIT SECTION)



MEMO